Usenet Newsgroup Archive: rec.radio.amateur.antenna

2007-08 - 2007-10

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Date span: 2007-08-01 through 2007-10-31

Source text: rec.radio.amateur.antenna.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 3,021

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Re: Near field vs Far field measurements at 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 00:39:15 UTC
From: Steve Reinhardt <stevereinhardt@noearthspamlink.net>
Message-ID: <VDQri.50$1I1.11@newsfe12.lga>
Source record: 37815

Jim Lux wrote:

>> When your "Antennas Under Test" are moderate gain devices, I would go
>> for several wavelengths. For low to moderate gain (up to 10 dBi), you
>> are in the far field within about 4 WL.
>>
>> The reason for the short distance is that the direct signal is strong,
>> hence influence of reflections is less. You can reduce the effect of
>> reflections by taking a receive antenna with some directivity.
>>
>> You can be sure that you are in the far field distance when
>> D > 2*B^2/lambda, where B = overall size of the antenna (from one
>> extremity to another). For several antenna types (like yagis), you can
>> halve this distance when you are interested in main beam gain only.
>
>
> This formula is actually an embodiment of the venerable Rayleigh limit,
>
> It actually says that wavefront is flat to within a fraction of a
> wavelength (about 1/13th or 22 degrees). The implications for gain
> measurement is that the gain you measure at 2*b^2/lambda distance will
> be the same as you'd measure if you were truly in the far field, to
> within about a reasonable degree of accuracy (1% or there abouts).
>
> The derivation is this:
> distance to center of antenna = D
> distance to edge of antenna Dedge = sqrt(D^2+(B/2)^2) {Pythagorean
> formula}
>
> phase error = (D-Dedge)/lambda {wavelengths}
>
> etc.
>
>
> if you start getting lambda close to B, then the relative path length
> difference gets quite large, and you have to start worrying about the
> current distribution or illumination non-uniformity.

This is a big help! The equations I read did not help me understand the
problem. (Though when I read 'Rayleigh', thoughts of optical flats and
oversized college physics texts popped into my head.)

So, if I have a 4 element collinear, measuring 2 wl, or about 4 meters,
and the frequency of interest is about 2 meters, then I'm effectively
far field when I reach a distance > 16 wl.

Cool. The neat part about the football field is that the nearest reflection is well over 1.4 times the distance between source and measurement antennae. It's flat with no RF hard surfaces around the perimeter. That's not to say there are no other sources of measurement error, just that I think their contribution will be small.

I'll report back if I can get it done before school starts, and they want my RF range back for their sports activities :-)

73,
Steve
W1KF

2. Re: Wants to poke out strong signal

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 00:47:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6mkva3t04qqksnpdvbgu6s4kf8osr1qopi@4ax.com>
Source record: 37816

On Tue, 31 Jul 2007 15:45:19 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

> I tend to agree with Roy. Omni or not, Every antenna radiates in every
>direction. Maybe not as much in one as the other, but radiate they do.
>
> So many folks look at the Take off angle as some sort of blob that
>leaps off the antenna at a particular angle, and if it isn't at that
>"correct" angle, then heaven help you i you are trying to operate NVIS
>or DX or whatever.

Hi Mike,

Another metaphor would be Craps shooting. The distribution of
separate outcomes is each 1 in 36, but there are a preponderance of 7s
over time with very much higher probability. To ignore the
preponderance (this blob) to the observation of single rolls would
have left the design of antennas stuck in the age of Marconi.

> That being the case, I questioned if assuming that the angle for best
>reception is also the angle for best transmission, especially with what
>appears to be a change over time.

Reciprocity is another one of those rules revealed by the
preponderance of outcomes - and so often decried as impossible through
single reports of failure.

However, returning to the original link, and the design behind it, it
is called beam forming as practiced through controlled delays. If the
math reveals that a signal is peaked with one particular setting of a
combination of delays, and if that combination reveals an apparent
source coming in from a particular angle; then we can say that yes,
Virginia, there is a take off angle. We can reasonably expect that
calling back through the same combination of delays through to those
various antennas will result in a more optimum link.

That, or through this design, you can adjust to obtain that optimum
(which will more than likely reveal another take off angle). You will
then be able to ponder why they come in best at one angle while you go
out best at another. Yes, a distinct possibility that becomes more
distinct through this control, and the resolution of take off angles.

Now, as to the matter of this "some sort of blob that leaps off the
antenna." Modeling propagation will reveal if you define a circuit
(the point of origination and the intended audience's location), and
you chip in the general antenna radiation lobe characteristic; then at
significant distances a matter of one degree can be resolved. For

sharply lobed antennas (and this 6 bay is quickly approaching that), the roll-off response and a one degree shift can plunge the listener into deafness. Of course, the vagaries of propagation can easily upset the apple cart - but again, this sharply reveals how "some sort of blob" has become distinctly important compared to the gross distribution of possibilities.

73's
Richard Clark, KB7QHC

3. Re: What is the BEST ladder line tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 01:52:47 UTC
From: Harry7 <cpa599@gmail.com>
Message-ID: <1185933167.887230.4160@l70g2000hse.googlegroups.com>
Source record: 37817

A good link coupled tuner is your best choice (a la' the Johnson Matchbox). The reason is simple. It's a naturally balanced tuner. No need to force the transmitter's unbalanced output into a balanced antenna feed line via a balun (balanced to unbalanced) because there is no direct connection between the transmitter & the feedline. The coupling between the transmitter & the feedline occurs by way of two closely spaced inductors (coils), one is the primary or link the other is the secondary.

You can homebrew a link coupled tuner fairly easily although the small, 250 watt Johnson Matchbox (available on ebay for about $100) can handle 1000 watts PEP SSB since the Matchboxes are rated for continuous duty AM fone.[Formula 1000 watts SSB -50% for no carrier = 500 watts - 50% for one sideband = 250 watts]. I have two.

The only drawback for the Johnson Matchbox is they don't extend down to 160 meters (if you want to work 160).

If your interested in homebrewing your own link coupled tuner, google:
K1JJ Tuner
>From the search results you'll be able to figure out how to build one. I built one [not pretty] that works great. I added a cap to tune the link.

Good Luck

Terry
W8EJO

4. Re: Near field vs Far field measurements at 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 02:06:57 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13avqm52jglvi35@corp.supernews.com>
Source record: 37818

Steve Reinhardt wrote:
> . . .
> Cool. The neat part about the football field is that the nearest
> reflection is well over 1.4 times the distance between source and
> measurement antennae. It's flat with no RF hard surfaces around the
> perimeter. That's not to say there are no other sources of measurement
> error, just that I think their contribution will be small.
> . . .

I'm not at all an expert on antenna measurement. I know just enough to realize that it's extremely difficult to do with even moderate accuracy, and that some professionals with the very best equipment tend to trust modeling more than measurement. Besides problems with reflections, you also have the problem of assuring a constant real power into antennas of different impedances, feedline radiation, and a host of other confounding factors.

That being said, I'm sure you'll learn a lot in the process, and you might be able to get useful results in spite of the difficulties.

I was really saddened to see, some years ago, a published group of measurements like you're proposing, on a bunch of different antennas. The results, while quite believable, showed some pattern skewing and other artifacts which almost certainly weren't really due to the antennas themselves. What saddened me was that the people running this detailed, meticulous, and time consuming project hadn't thought to include a measurement of any antenna with a well known pattern and gain such as a dipole. Please include some reference antennas which are well known and/or easy to model! Otherwise, the accuracy of all the results is purely guesswork. A dipole might not be the best reference because its broad pattern is more subject to reflections than a Yagi. But a good reference Yagi (such as one of the NBS standard Yagis) or two could be constructed and included.

You'll get strong reflections from the ground between the antennas. It'll be easy to calculate the elevation angle of the signal from the transmitting antenna which will arrive at the receiving antenna after reflecting from the ground. If your antennas are far apart, this angle will be more nearly horizontal, where antenna gain is higher, than if they're close. So there may will be a stronger reflection if the antennas are farther rather than closer (although most moderately sized horizontal Yagis have a broad elevation pattern, not very different from a dipole). This ground reflection could have a profound effect on measured gain, and could cause some large differences with only small differences in, say, antenna height. If the antennas are close and the

angle steep, then the pattern at the elevation angle being reflected might be quite different from the horizontal antenna pattern. This will result in a distortion of the measured pattern relative to the free space pattern. This is something which will show up more clearly in a plot of a reference Yagi with gain closer to the actual antenna under test than something like a dipole with a simpler pattern.

Have fun! I'll be eager to see how well your reference antenna measurements come out.

Roy Lewallen, W7EL

5. Re: Off-center fed dipole, fed with ladder line?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 03:01:23 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <7ISri.12194$eY.7092@newssvr13.news.prodigy.net>
Source record: 37819

Rick (W-A-one-R-K-T) wrote:
> On page 7-10 of the ARRL Antenna Book 20th Edition, there is a discussion
> of "Off-Center-Fed Dipoles". It shows a dipole 130 feet long, fed 45.3
> feet (a bit over 1/3 wavelength) from one end with a 4:1 balun, then coax
> to the shack, and used on 80 thru 20.
>
> I'm wondering if I can feed that with ladder line instead of coax and
> balun.

My 1957 ARRL Handbook shows the OCF fed with 300 ohm
twinlead using an air-core balun which was popular
at that time. The feedline will radiate some but
that may not be a bad thing. (The Carolina "Windom"
feedline is designed to radiate.) Link coupling,
as used in the Johnson Matchboxes, would minimize
the common-mode current at the tuner.
--
73, Cecil http://www.w5dxp.com

6. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 03:25:11 UTC
From: Stuart Grey <stuart.grey@comcast.net>
Message-ID: <vsadnYd6eZ6KYDLbnZ2dnUVZ_sninZ2d@comcast.com>
Source record: 37820
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

On Mon, 30 Jul 2007 03:57:30 -0700, hot-ham-and-cheese wrote:

> On Jul 29, 8:46 pm, Stuart Grey <stuart.g...@comcast.net> wrote:
>> On Sun, 29 Jul 2007 16:27:44 -0700, hot-ham-and-cheese wrote:
>> > On Jul 29, 8:22 pm, Notan <notan@ddressthatcanbespammed> wrote:
>> >> kb9...@hotmail.com wrote:
>> >> > On Jul 29, 5:14 pm, hot-ham-and-che...@hotmail.com wrote:
>> >> >> On Jul 29, 11:41 am, Stuart Grey <stuart.g...@comcast.net> wrote:
>>
>> >> >> I'm slightly sunburned from a week at Virginia Beach
>> >> > hope you had fun
>>
>> >> Don't really care.
>>
>> > We were talking about illnesses and injuries. I guess yours is apathy.
>>
>> I thought Notan was confessing his illness. I mean, he's just too
>> apathetic to get into tree hugging. All the other tree huggers say he's
>> sap challenged.
>
> It's and agressive, debilitating disease.

It saps your will. It leaves you lifeless.

7. Re: Wants to poke out strong signal

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 03:44:16 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <mkTri.72047$dI1.9852@newsfe08.phx>
Source record: 37821

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:6mkva3t04qqksnpdvbgu6s4kf8osr1qopi@4ax.com...
> On Tue, 31 Jul 2007 15:45:19 -0400, Michael Coslo <mjc5@psu.edu>
> wrote:
>
> > I tend to agree with Roy. Omni or not, Every antenna radiates in every
> >direction. Maybe not as much in one as the other, but radiate they do.
> >
> > So many folks look at the Take off angle as some sort of blob that
> >leaps off the antenna at a particular angle, and if it isn't at that
> >"correct" angle, then heaven help you i you are trying to operate NVIS
> >or DX or whatever.
>
> Hi Mike,
>
> Another metaphor would be Craps shooting. The distribution of
> separate outcomes is each 1 in 36, but there are a preponderance of 7s
> over time with very much higher probability. To ignore the
> preponderance (this blob) to the observation of single rolls would
> have left the design of antennas stuck in the age of Marconi.

< snip >

I was curious to see the actual distribution for Craps. If you're curious
enough to scroll down , you can see the blob at 7, courtesy of MS Excel.
It's a apt metaphor for takeoff angle. Thanks, Richard.

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8. Re: Near field vs Far field measurements at 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 03:48:24 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <coTri.7566$yg1.763@trnddc04>
Source record: 37822

"Steve Reinhardt" <stevereinhardt@noearthspamlink.net> wrote in message
news:koKri.22$sM.0@newsfe03.lga...
> Gentlemen,
>
> If a man was of a mind to try to get some approximate antenna gain
> comparisons, how many wavelengths distant might you like to separate the
> antennas?
>
> The proposed scenario is this: make a pair of 2M dipoles, one for
> reference, one for receive. I was planning on using the local high school
> football field, which is on the order of 50 wl, give or take. Transmit a
> few mW at the design frequency, measure the signal strength, then repeat
> with an alternate antenna, say a j-pole, collinear, or something else.
>
> Now, this leaves out a whole bunch of useful information, that would be
> tough for me to measure, like spherical gain distribution, etc. I'm hoping
> for a figure of merit for the actual implementation of the tested antenna.
> (Which, as you can imagine, I could model and save myself the
> aggravation.)
>
> I was pondering all this, when it occurred to me that I could not easily
> determine when I get to the point where the square law behavior dominates.
> I've seen a couple of equations relating the antenna dimension to
> wavelength, but I must be really stupid today, because it's just not
> sinking in.
>
> Anyone care to comment?
>
> 73,
> Steve
> W1KF

Hi Steve

It is fairly easy to record exact radiation patterns of "2 meter" antennas
at 137 MHz, using NOAA satellites at the Illuminator. If you have any
interest in the details, you can contact me anytime.
Patrik Tast developed a (free) program for me that produces elevation
plane patterns of the antenna as the NOAA satellite passes over. Since each
satellite passes over 6 or 8 times per day, decent hemispheric patterns can
be made.
I'd guess that the plot of the antenna pattern, when using Patrik's
program is more accurate than any other method when evaluating ground based
"2 meter" antennas. I am open to learning where I'm wrong about the
accuracy.

Jerry

9. Re: matching masts as vertical antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 04:08:50 UTC
From: cliff wright <c.c.wright@paradise.net.nz>
Message-ID: <46b00752@clear.net.nz>
Source record: 37823

nm5k@wt.net wrote:
> On Jul 27, 8:21 pm, Owen Duffy <n...@no.where> wrote:
>
>>cliff wright <c.c.wri...@paradise.net.nz> wrote innews:46aa87cc@clear.net.nz:
>>
>>
>>
>>
>>>n...@wt.net wrote:
>>>
>>>>On Jul 26, 5:14 pm, Owen Duffy <n...@no.where> wrote:
>>
>>>>>n...@wt.net wrote
>>>>>innews:1185476045.317446.10860@d55g2000hsg.googlegroups.com:
>>
>>>>>A 3/8 wave radiator is easily matched with a single variable cap..
>>
>>>>>Details?
>>
>>>>Place cap at the feedpoint in series . Viola...
>>>>This is fairly common really.. IE: feeding "extended"
>>>>Inv L's where the length is appx 3/8 wave.
>>>>The usual reason for that is to raise the maximum current
>>>>point up off the ground a bit to lower ground losses..
>>>>BTW, once you find the best match, and find the cap value
>>>>needed, you could replace the variable with a fixed cap.
>>>>MK
>>
>>>G'Day!
>>>Well I have tried the series cap idea of course first.
>>>It is set up at the moment with a 500 pF TX type variable in the
>>>matching box. However according to my SWR bridge it has quite a high
>>>VSWR and varying the 500 pF had very little effect. And yes, the coax
>>>is OK. 50 Ohm foam dielectric type which I have used up to 70 cM OK.
>>>My phased verticals that I mentioned did use capacitive matching in
>>>this case 1000 pF RX variables. But they were just a little too long.
>>>Unfortunately because of space restrictions I am limited to 4 radials.
>>>Thats one reason why I was trying for more than 1/4 wave.
>>
>>>73's Cliff wright ZL1BDA.
>>
>>Well, it isn't quite "viola" or even "voila!" is it. MK didn't state the
>>limitations to his method.
>

>
> I wasn't really expecting the feed R to be that high.. If it's 100
> ohms,
> then yep, the best match would be 2:1. If that's the case, then yes,
> he would need to use an L network if he wants the match better than
> that.
> I never had any trouble using this method, but thinking about it, most
> of mine were with 160m inv L's.. Maybe it was the shorter vertical
> section that gave me a low enough feed Z to match .
> I'd have to model it to see.
> MK
>
Many thanks folks!
I tried out Pat Hawker (G3VA's) matching network from "Amateur Radio
Techniques" and it works like a charm. SWR now nearly 1:1 and antenna
much better on receive also.
I find that propogation and QRN here makes it very useful to have both
horizontal and vertical antennas available.
Fortunately I had a bit of left over minductor that turned out to be
just right for the tapped coil and it tunes nicely with about 150pF
of capacitance.
This match is even with the G5RV raised on the mast.
Vy 73's Cliff Wright ZL1BDA ex G3NIA.

10. Re: What is the BEST ladder line tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 04:19:49 UTC
From: Alan WA4SCA <APBIDDLE@UNITED.NET>
Message-ID: <3220b3lh1oclo4aklrf1qnnb1tlfbdqvpa@4ax.com>
Source record: 37824

If it hasn't been mentioned, the SAMS may probably be the ultimate unit: http://www.eham.net/reviews/detail/6677 However, its cost is probably equal to what many have invested in their entire shack. Still not cheap, but more reasonable, is the AT-515: http://www.hamware.de/hardware/tuner515/at515-e.htm Both were represented at Dayton this year, and are clearly not Might Fine Junk.

--
Alan
WA4SCA

11. Re: Near field vs Far field measurements at 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 04:51:53 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <JjUri.8380$FO1.2846@trnddc05>
Source record: 37825

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:coTri.7566$yg1.763@trnddc04...
>
> "Steve Reinhardt" <stevereinhardt@noearthspamlink.net> wrote in message
> news:koKri.22$sM.0@newsfe03.lga...
>> Gentlemen,
>>
>> If a man was of a mind to try to get some approximate antenna gain
>> comparisons, how many wavelengths distant might you like to separate the
>> antennas?
>>
>> The proposed scenario is this: make a pair of 2M dipoles, one for
>> reference, one for receive. I was planning on using the local high school
>> football field, which is on the order of 50 wl, give or take. Transmit a
>> few mW at the design frequency, measure the signal strength, then repeat
>> with an alternate antenna, say a j-pole, collinear, or something else.
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>> Now, this leaves out a whole bunch of useful information, that would be
>> tough for me to measure, like spherical gain distribution, etc. I'm
>> hoping for a figure of merit for the actual implementation of the tested
>> antenna. (Which, as you can imagine, I could model and save myself the
>> aggravation.)
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>> I was pondering all this, when it occurred to me that I could not easily
>> determine when I get to the point where the square law behavior
>> dominates. I've seen a couple of equations relating the antenna dimension
>> to wavelength, but I must be really stupid today, because it's just not
>> sinking in.
>>
>> Anyone care to comment?
>>
>> 73,
>> Steve
>> W1KF
>
> Hi Steve
>
> It is fairly easy to record exact radiation patterns of "2 meter"
> antennas at 137 MHz, using NOAA satellites at the Illuminator. If you
> have any interest in the details, you can contact me anytime.
> Patrik Tast developed a (free) program for me that produces elevation
> plane patterns of the antenna as the NOAA satellite passes over. Since
> each satellite passes over 6 or 8 times per day, decent hemispheric
> patterns can be made.

> I'd guess that the plot of the antenna pattern, when using Patrik's
> program is more accurate than any other method when evaluating ground
> based "2 meter" antennas. I am open to learning where I'm wrong about
> the accuracy.
>
> Jerry

Examples of the radiation pattern data that can be acquired with Patrik Tast's SignalPlotter program can be seen on one of his sites http://213.250.83.83/~patrik/apt/logs/portable/July-22-2007/daily/

I have used this SignalPlotter program to make radiation pattern plots by recording rssi voltage with a simple voltmeter with a RS232 connection and with LabJack data recorder.

Jerry

12. Re: 80+40 MTR Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 05:20:14 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <mKUri.51050$kK1.33215@newsfe14.phx>
Source record: 37826

"Howard Kowall" <hkowall@shaw.ca> wrote in message
news:WImri.17500$fJ5.3405@pd7urf1no...
> I have just built a 80 mtr dipole c/w 1:1 balun ,feed with RG8X coax
> works great, really dont even need a tuner(which i am trying to get away
> from)
> here is what i want to do.I would like to get 40mtrs on it,without using
> tuner,so I want to use a couple of latching realys to open the dipole up
at
> the 40 mtr section of the dipole,1 relay for each leg.
> I want to use latching relays so they do not have to be energized when i
am
> on 80mtr portion or viseversa if i use the normally closed contact.I was
> going to feed 1 end of the realy coil from the sheild of the coax and run
1
> wire for the other side of the coil to my switch point.Does anyone have a
> better idea on how to do this or is this all a waste of time.If this is ok
> to do and worth it does anyone have a realy PRT# I could use,I only run
100
> watts max
> Also i have tried to strap on a 40mtr dipole to the 80mtr and the 40 would
> not tune at all and I dont have the room to run the 40mtr dipole away from
> the 80mtr
> thanx
> Howard

My friend K6SJA described an elegant approach to this problem, so no, it's
not a waste of time.

At the two points where you need to open the elements, insert pull-chain
operated switches. Home Depot has them -- I just bought a couple of them
this month for use in lighting fixtures. Each switch can be rigidly mounted
to a flat fiber insulator and the pull-chains extended with twine through
pulleys near one or both of the antenna's end supports. (This way, you're
not pulling straight down in the middle of the elements and maybe breaking
something.) Whether to operate both switches from one end of the antenna is
your choice.

I don't know max power tolerance. I suppose if you cooked one switch, you
could next try two.

Besides the rather smallish Home Depot switches, I have seen beefier
versions that were built into lamp sockets.

73, OM

"Sal"

13. Re: Near field vs Far field measurements at 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 08:10:20 UTC
From: Wimpie <wimtel@tetech.nl>
Message-ID: <1185955820.214836.167100@d55g2000hsg.googlegroups.com>
Source record: 37827

```
On 1 ago, 02:39, Steve Reinhardt <stevereinha...@noearthspamlink.net>
wrote:
> Jim Lux wrote:
> >> When your "Antennas Under Test" are moderate gain devices, I would go
> >> for several wavelengths. For low to moderate gain (up to 10 dBi), you
> >> are in the far field within about 4 WL.
>
> >> The reason for the short distance is that the direct signal is strong,
> >> hence influence of reflections is less. You can reduce the effect of
> >> reflections by taking a receive antenna with some directivity.
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> >> D > 2*B^2/lambda, where B = overall size of the antenna (from one
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> > wavelength (about 1/13th or 22 degrees). The implications for gain
> > measurement is that the gain you measure at 2*b^2/lambda distance will
> > be the same as you'd measure if you were truly in the far field, to
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> > formula}
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> > if you start getting lambda close to B, then the relative path length
> > difference gets quite large, and you have to start worrying about the
> > current distribution or illumination non-uniformity.
>
> This is a big help! The equations I read did not help me understand the
> problem. (Though when I read 'Rayleigh', thoughts of optical flats and
> oversized college physics texts popped into my head.)
>
> So, if I have a 4 element collinear, measuring 2 wl, or about 4 meters,
> and the frequency of interest is about 2 meters, then I'm effectively
> far field when I reach a distance > 16 wl.
```

>
> Cool. The neat part about the football field is that the nearest
> reflection is well over 1.4 times the distance between source and
> measurement antennae. It's flat with no RF hard surfaces around the
> perimeter. That's not to say there are no other sources of measurement
> error, just that I think their contribution will be small.
>
> I'll report back if I can get it done before school starts, and they
> want my RF range back for their sports activities :-)
>
> 73,
> Steve
> W1KF

Hello Steve,

The result of the 2*B^2/lambda formula is in meters. For your antenna with 4m size, you can be sure to be in the far field at 16m (AKA Fraunhofer region). The minimum distance must be the sum of the far field distance for both AUT and reference antenna.

As Roy also mentioned, real measurements are difficult. To play your own devil's advocate, you could run gain measurements for different (many) distances. From the Gain versus Distance graph you can get an impression of the accuracy. The same you can do for various heights to get an impression of the influence of ground reflection.

A complete other approach is to include the ground reflection in the measurement. That might no be a bad option. The requirement for such a measurement setup is that for both receive and transmit antennas, the ground reflection must fall well within the main beam. Horizontal polarization is preferred. VSWR of both antennas must not be affected by ground reflection.

Best regards,

Wim
PA3DJS
www.tetech.nl

14. Re: Wants to poke out strong signal

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 09:54:35 UTC
From: nm5k@wt.net
Message-ID: <1185962075.118909.301210@e16g2000pri.googlegroups.com>
Source record: 37828

On Jul 31, 2:45 pm, Michael Coslo <m...@psu.edu> wrote:

>
> What I did learn was that at any given moment, either the vertical or
> the horizontal antenna was "the best". While some generalizations could
> be made for distance and the angle the signal was likely coming in at,
> there was a lot of variation within it. The difference could vary over
> time also.

I did the same thing at one time on 40m. "Compared a 1/4 WL ground
plane vs a horizontal dipole. You see some strange things at times.
The distance of the path has a large bearing over which is best.
In my case, 800 miles seemed to be about the crossover point
where both would be about the same on peaks. But even then,
sometimes you will see peaks on the vertical that are the strongest.
The ionosphere seems to tumble back and forth.
On the longer paths at say 1500 miles, the peaks on the vertical
would
almost always be the strongest. And the farther the distance out,
the
larger the difference would be. IE: the vertical would be 2 S units
better
vs the dipole to CA. This was very repeatable, and almost the same
margin
on any given night. To VK, the difference would be 4 S units.. Again,
that
same margin most any night.
As you can see, I'm a believer in a good vertical for the lower bands.
The only thing that could beat it were either yagi's, or multi element
arrays like the various curtains, etc.. Other than that, I smoked
everyone
else on the band to DX.. I did run a KW though.. :/ I would be 20
over 9
in Tokyo...
The bobtail curtains could put a hurt on me though... :(
But, they had three elements, vs my one..
I almost always used receive as the indication as to which was best
at a given time. I could probably count the number of times
reciprical
operation didn't pan out on a single hand, and have a few fingers
left..
It's pretty rare not to be reciprical receive vs transmit.. IE: almost
never happens, except in a really weird situations.

>
> That being the case, I questioned if assuming that the angle for best
> reception is also the angle for best transmission, especially with what
> appears to be a change over time.

I think it's quite accurate.. I use my switch and compare.. Whichever
receives the best signal gets the nod as far as transmit.
BTW, my vertical was pretty good compared to many you see...
Was full sized, with the base at 36 ft with sloping radials. Not much
loss involved compared to some you see on the ground with a
few meager radials.. It was a lot better than the 1/4 wave I had
ground mounted with 32 radials.
It would always seem just as "hot" as my dipole on receive. It was
just vertical. So it's quite possible for a lesser vertical not to see
the
results I had. As an example, the ground mount with 32 radials
was barely better than the dipole to CA. You didn't see the 2 S unit
difference as on the elevated GP I used later. So in the case of
the ground mount, the distance where it would overtake the
horizontal antenna on peaks would be farther out, vs the GP.
MK

15. Re: Near field vs Far field measurements at 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 11:29:05 UTC
From: Steve Reinhardt <stevereinhardt@noearthspamlink.net>
Message-ID: <89_ri.8$sk7.6@newsfe06.lga>
Source record: 37829

Roy Lewallen wrote:
> Steve Reinhardt wrote:
>> . . .
>> Cool. The neat part about the football field is that the nearest
>> reflection is well over 1.4 times the distance between source and
>> measurement antennae. It's flat with no RF hard surfaces around the
>> perimeter. That's not to say there are no other sources of measurement
>> error, just that I think their contribution will be small.
>> . . .
>
> I'm not at all an expert on antenna measurement. I know just enough to
> realize that it's extremely difficult to do with even moderate accuracy,
> and that some professionals with the very best equipment tend to trust
> modeling more than measurement. Besides problems with reflections, you
> also have the problem of assuring a constant real power into antennas of
> different impedances, feedline radiation, and a host of other
> confounding factors.
>
> That being said, I'm sure you'll learn a lot in the process, and you
> might be able to get useful results in spite of the difficulties.
>
> I was really saddened to see, some years ago, a published group of
> measurements like you're proposing, on a bunch of different antennas.
> The results, while quite believable, showed some pattern skewing and
> other artifacts which almost certainly weren't really due to the
> antennas themselves. What saddened me was that the people running this
> detailed, meticulous, and time consuming project hadn't thought to
> include a measurement of any antenna with a well known pattern and gain
> such as a dipole. Please include some reference antennas which are well
> known and/or easy to model! Otherwise, the accuracy of all the results
> is purely guesswork. A dipole might not be the best reference because
> its broad pattern is more subject to reflections than a Yagi. But a good
> reference Yagi (such as one of the NBS standard Yagis) or two could be
> constructed and included.
>

Well, as I mentioned, this is less about an absolute antenna gain than a
figure of merit. Using a dipole as the first, reference transmitting
antenna is part of the plan. I may be crazy, but I'm not entirely stupid
;-) (Well, maybe. Time will tell...)

> You'll get strong reflections from the ground between the antennas.
> It'll be easy to calculate the elevation angle of the signal from the
> transmitting antenna which will arrive at the receiving antenna after
> reflecting from the ground. If your antennas are far apart, this angle

> will be more nearly horizontal, where antenna gain is higher, than if
> they're close. So there may will be a stronger reflection if the
> antennas are farther rather than closer (although most moderately sized
> horizontal Yagis have a broad elevation pattern, not very different from
> a dipole). This ground reflection could have a profound effect on
> measured gain, and could cause some large differences with only small
> differences in, say, antenna height. If the antennas are close and the
> angle steep, then the pattern at the elevation angle being reflected
> might be quite different from the horizontal antenna pattern. This will
> result in a distortion of the measured pattern relative to the free
> space pattern. This is something which will show up more clearly in a
> plot of a reference Yagi with gain closer to the actual antenna under
> test than something like a dipole with a simpler pattern.

Ah, yet another thing I have to consider. Since at least two of the tested antennas will be primarily vertical, I was planning to make the test antennas all vertical. So, I can talk myself into believing the ground reflections are part of the real world installations, or I can chuck it all and rely solely upon modeling. One is probably smarter, the other more viscerally stimulating. I leave to the reader to sort out which is which.

>
> Have fun! I'll be eager to see how well your reference antenna
> measurements come out.
>
> Roy Lewallen, W7EL

Thanks for the guidance. The journey may be far more interesting that the result!

16. Re: Near field vs Far field measurements at 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 11:32:13 UTC
From: Steve Reinhardt <stevereinhardt@noearthspamlink.net>
Message-ID: <3c_ri.14$sk7.0@newsfe06.lga>
Source record: 37830

Wimpie wrote:
> On 1 ago, 02:39, Steve Reinhardt <stevereinha...@noearthspamlink.net>
> wrote:
--snip--

>>> wavelength (about 1/13th or 22 degrees). The implications for gain
>>> measurement is that the gain you measure at 2*b^2/lambda distance will
>>> be the same as you'd measure if you were truly in the far field, to
>>> within about a reasonable degree of accuracy (1% or there abouts).
>>> The derivation is this:
>>> distance to center of antenna = D
>>> distance to edge of antenna Dedge = sqrt(D^2+(B/2)^2) {Pythagorean
>>> formula}
>>> phase error = (D-Dedge)/lambda {wavelengths}
>>> etc.
>>> if you start getting lambda close to B, then the relative path length
>>> difference gets quite large, and you have to start worrying about the
>>> current distribution or illumination non-uniformity.
>> This is a big help! The equations I read did not help me understand the
>> problem. (Though when I read 'Rayleigh', thoughts of optical flats and
>> oversized college physics texts popped into my head.)
>>
>> So, if I have a 4 element collinear, measuring 2 wl, or about 4 meters,
>> and the frequency of interest is about 2 meters, then I'm effectively
>> far field when I reach a distance > 16 wl.
>>
>> Cool. The neat part about the football field is that the nearest
>> reflection is well over 1.4 times the distance between source and
>> measurement antennae. It's flat with no RF hard surfaces around the
>> perimeter. That's not to say there are no other sources of measurement
>> error, just that I think their contribution will be small.
>>
>> I'll report back if I can get it done before school starts, and they
>> want my RF range back for their sports activities :-)
>>
>> 73,
>> Steve
>> W1KF
>
> Hello Steve,
>
> The result of the 2*B^2/lambda formula is in meters. For your antenna
> with 4m size, you can be sure to be in the far field at 16m (AKA
> Fraunhofer region). The minimum distance must be the sum of the far

> field distance for both AUT and reference antenna.
>
> As Roy also mentioned, real measurements are difficult. To play your
> own devil's advocate, you could run gain measurements for different
> (many) distances. From the Gain versus Distance graph you can get
> an impression of the accuracy. The same you can do for various heights
> to get an impression of the influence of ground reflection.
>
> A complete other approach is to include the ground reflection in the
> measurement. That might no be a bad option. The requirement for such a
> measurement setup is that for both receive and transmit antennas, the
> ground reflection must fall well within the main beam. Horizontal
> polarization is preferred. VSWR of both antennas must not be affected
> by ground reflection.
>
> Best regards,
>
> Wim
> PA3DJS
> www.tetech.nl
>

Wim,

Thank you. I really don't know where my head is at lately. Of course,
the square term means the result will have units of length, not wavelength.

As I mentioned in my reply to Roy, the tested antennas are designed to
be vertical, which may play havoc with the whole idea.

More to follow, and thanks for reminding me my basic math skills have
ducked into a hole for the moment!

73,
Steve
W1KF

17. Re: What is the BEST ladder line tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 11:44:12 UTC
From: Harry7 <cpa599@gmail.com>
Message-ID: <1185968652.852705.148850@19g2000hsx.googlegroups.com>
Source record: 37831

Both of these designs are of the Balanced L or Double L variety. Both require a balun at the input to convert the 50 ohm unbalanced output of the transmitter to the balanced tuner & feedline. You still haven't gotten away from the main cause of inefficiency & power loss which is the balun. [see http://www.somis.org/bbat.f1.jpg]

These double L tuners can be a PITA to build & use also. You need two identical inductances at all times in the circuit. This requires either some mechanical means of driving two identical roller inductors simultaneously (so that the inductance in each leg always matches) or two identical switched inductors with exactly the same tap points.

The link coupled design of the Matchbox takes the balun (and it's potential for power loss) out of the circuit. They are also much simpler designs, easier to homebrew & tune.

Terry
W8EJO

On Aug 1, 12:19 am, Alan WA4SCA <APBID...@UNITED.NET> wrote:
> If it hasn't been mentioned, the SAMS may probably be the ultimate
> unit: http://www.eham.net/reviews/detail/6677 However, its cost is
> probably equal to what many have invested in their entire shack. Still
> not cheap, but more reasonable, is the
AT-515:http://www.hamware.de/hardware/tuner515/at515-e.htm Both were
> represented at Dayton this year, and are clearly not Might Fine Junk.
>
> --
> Alan
> WA4SCA

18. Re: Near field vs Far field measurements at 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 13:13:52 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fn11b39uqco39kbgtdr2dq6p509j43ne9h@4ax.com>
Source record: 37732

On Wed, 01 Aug 2007 04:51:53 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

>
>"Jerry Martes" <j.jmartes@verizon.net> wrote in message
>news:coTri.7566$yg1.763@trnddc04...
>> Hi Steve
>>
>> It is fairly easy to record exact radiation patterns of "2 meter"
>> antennas at 137 MHz, using NOAA satellites at the Illuminator. If you
>> have any interest in the details, you can contact me anytime.
>> Patrik Tast developed a (free) program for me that produces elevation
>> plane patterns of the antenna as the NOAA satellite passes over. Since
>> each satellite passes over 6 or 8 times per day, decent hemispheric
>> patterns can be made.
>> I'd guess that the plot of the antenna pattern, when using Patrik's
>> program is more accurate than any other method when evaluating ground
>> based "2 meter" antennas. I am open to learning where I'm wrong about
>> the accuracy.
>>
>> Jerry
>
> Examples of the radiation pattern data that can be acquired with Patrik
>Tast's SignalPlotter program can be seen on one of his sites
>http://213.250.83.83/~patrik/apt/logs/portable/July-22-2007/daily/
>
> I have used this SignalPlotter program to make radiation pattern plots by
>recording rssi voltage with a simple voltmeter with a RS232 connection and
>with LabJack data recorder.
>
> Jerry
>

Hi Jerry,

Very good sources of information.

73's
Richard Clark, KB7QHC

19. Re: What is the BEST ladder line tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 13:39:28 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <6g21b3d959e6haq1mgdrmcsj457sooneb6@4ax.com>
Source record: 37733

On Wed, 01 Aug 2007 11:44:12 -0000, Harry7 <cpa599@gmail.com> wrote:

>Both of these designs are of the Balanced L or Double L variety. Both
>require a balun at the input to convert the 50 ohm unbalanced output
>of the transmitter to the balanced tuner & feedline. You still haven't
>gotten away from the main cause of inefficiency & power loss which is
>the balun. [see http://www.somis.org/bbat.f1.jpg]
>
>These double L tuners can be a PITA to build & use also. You need two
>identical inductances at all times in the circuit. This requires
>either some mechanical means of driving two identical roller inductors
>simultaneously (so that the inductance in each leg always matches) or
>two identical switched inductors with exactly the same tap points.
>
>The link coupled design of the Matchbox takes the balun (and it's
>potential for power loss) out of the circuit. They are also much
>simpler designs, easier to homebrew & tune.
>
>Terry
>W8EJO

I wonder if you have built a balanced L tuner? I made mine using only hand tools and a drill press and had no problems. Also why do you say they are a PITA to use? I adjust mine using only two knobs - the same number of adustments I use on my Matchbox. Yes, I have both tuners.

Also, just how much of that terrible inefficiency and power loss does that balun have? In the link you gave the balun consisted of nothing more than a length of coax. There would be even less loss using a W2DU type balun in that it requires a shorter length of coax.

Additionally, my balance tuner will give a 1:1 match on all the HF bands (and anything in between) - something the Johnson Matchbox will not do.

So are you talking from experience or just hear say?

Danny, K6MHE

20. Re: 80+40 MTR Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 13:45:46 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <f80si.1786$ox5.864@nlpi068.nbdc.sbc.com>
Source record: 37734

Sal M. Onella wrote:
> At the two points where you need to open the elements, insert pull-chain
> operated switches.

My approach, in the early 50's, was not elegant but
it worked and it was fast. I had insulators at the
mid-point of each leg of the 80m dipole with a jumper
wire across them for 80m operation. The dipole was
on pulleys. It only took about three minutes to let
the dipole down, either attach or unattach one end
of the jumper wires, and pull the dipole back up.
Making 50 cents an hour working at Carter's Grocery
on Saturday limited my resources. :-)
--
73, Cecil http://www.w5dxp.com

21. Re: Request EZNEC computation

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 13:52:15 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <f8q36f$10d2$1@f04n12.cac.psu.edu>
Source record: 37735

JIMMIE wrote:
> Owen Duffy wrote:
>> BTW, someone suggested a vertical. Vertical's have very low gain at high
>> angles, so relatively unsuited to NVIS.
>>
>> Owen
>
> This would explain why the vertical would work into GA,Fl, VA, from NC
> but not into a station in SC less than 100 miles away.

On what band? That would be pretty normal on 20 meters.

- 73 de Mike KB3EIA -

22. Re: What is the BEST ladder line tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 13:59:56 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <xl0si.1787$ox5.1476@nlpi068.nbdc.sbc.com>
Source record: 37736

Harry7 wrote:
> Both of these designs are of the Balanced L or Double L variety. Both
> require a balun at the input to convert the 50 ohm unbalanced output
> of the transmitter to the balanced tuner & feedline. You still haven't
> gotten away from the main cause of inefficiency & power loss which is
> the balun. [see http://www.somis.org/bbat.f1.jpg]

The best way I have found to tune a balanced antenna
and feedline system, especially at high power, is at:

http://www.w5dxp.com/notuner.htm

The balun always sees a purely resistive differential
impedance between ~35 ohms and ~75 ohms. A 1:1 balun
with a choking action of 1000 ohms will virtually
eliminate conducted common-mode currents. Symmetrical
placement of the feedline to the antenna reduces
inducted common-mode currents. The needle on the MFJ
current meter barely moves on the most sensitive scale.
Under these circumstances, a w2du balun is not lossy.
--
73, Cecil http://www.w5dxp.com

23. Re: What is the BEST ladder line tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 14:46:35 UTC
From: Harry7 <cpa599@gmail.com>
Message-ID: <1185979595.655539.103400@g4g2000hsf.googlegroups.com>
Source record: 37737

Danny,

I've never built a balanced L tuner so I admit I'm speculating. The link coupled designs I've built seemed much easier & simpler mechanically & they will give 1:1 if the taps are in the right place. Just takes some intial fiddling to find the right places but once that's done you're good.

I'll agree the double L's seem to be just as easy to tune but the building always deterred me.

Have you ever measured the balance of your double L at various freqs. (current on each leg of the feedline)?

Terry
W8EJO

> I wonder if you have built a balanced L tuner? I made mine using only
> hand tools and a drill press and had no problems. Also why do you say
> they are a PITA to use? I adjust mine using only two knobs - the same
> number of adustments I use on my Matchbox. Yes, I have both tuners.
>
> Also, just how much of that terrible inefficiency and power loss does
> that balun have? In the link you gave the balun consisted of nothing
> more than a length of coax. There would be even less loss using a W2DU
> type balun in that it requires a shorter length of coax.
>
> Additionally, my balance tuner will give a 1:1 match on all the HF
> bands (and anything in between) - something the Johnson Matchbox will
> not do.
>
> So are you talking from experience or just hear say?
>
> Danny, K6MHE- Hide quoted text -
>
> - Show quoted text -

24. Re: Request EZNEC computation

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 14:54:46 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46b09ebf$0$8969$4c368faf@roadrunner.com>
Source record: 37738

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:f8q36f$10d2$1@f04n12.cac.psu.edu...
> JIMMIE wrote:
>> Owen Duffy wrote:
>>> BTW, someone suggested a vertical. Vertical's have very low gain at high
>>> angles, so relatively unsuited to NVIS.
>>>
>>> Owen
>>
>> This would explain why the vertical would work into GA,Fl, VA, from NC
>> but not into a station in SC less than 100 miles away.
>
> On what band? That would be pretty normal on 20 meters.
>
> - 73 de Mike KB3EIA -

Sorry its been years since its been in use. I was on a gov shortwave freq
and I dont remember. Normally we answered a net that was being controlled
from Atlanta. I had always assumed we couldnt here the station in SC because
of its antenna orientation but after I had a chance to visit the station I
realized there pattern should have been pretty much omni=directional.

Jimmie

25. Re: What is the BEST ladder line tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 15:01:33 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1185980493.384754.204010@d30g2000prg.googlegroups.com>
Source record: 37739

I have gone to homebrewing link coupled balanced tuners... Currently have three for 80 meters and 1 for 160 meters and starting 3 more 160 tuners... All massively overbuilt for ham power levels... Motorized tuning with remote controls and coax from the tuner to the shack...

I gave up on commercial tuners... None are actually balanced... All are compromises for maintaining their profit margin as opposed to optimized for power transfer...

denny / k8do

26. Re: Wants to poke out strong signal

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 15:06:38 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <f8q7i5$1jti$1@f04n12.cac.psu.edu>
Source record: 37740

Richard Clark wrote:
> On Tue, 31 Jul 2007 15:45:19 -0400, Michael Coslo <mjc5@psu.edu>
> wrote:
>
>> I tend to agree with Roy. Omni or not, Every antenna radiates in every
>> direction. Maybe not as much in one as the other, but radiate they do.
>>
>> So many folks look at the Take off angle as some sort of blob that
>> leaps off the antenna at a particular angle, and if it isn't at that
>> "correct" angle, then heaven help you i you are trying to operate NVIS
>> or DX or whatever.
>
> Hi Mike,
>
> Another metaphor would be Craps shooting. The distribution of
> separate outcomes is each 1 in 36, but there are a preponderance of 7s
> over time with very much higher probability. To ignore the
> preponderance (this blob) to the observation of single rolls would
> have left the design of antennas stuck in the age of Marconi.

No argument there Richard. I'm certain that on average, antenna X with
one TOA will perform better than antenna B with a different TOA.

>> That being the case, I questioned if assuming that the angle for best
>> reception is also the angle for best transmission, especially with what
>> appears to be a change over time.
>
> Reciprocity is another one of those rules revealed by the
> preponderance of outcomes - and so often decried as impossible through
> single reports of failure.
>
> However, returning to the original link, and the design behind it, it
> is called beam forming as practiced through controlled delays.

I'm curious about the technology to sense the incoming angle.

> If the
> math reveals that a signal is peaked with one particular setting of a
> combination of delays, and if that combination reveals an apparent
> source coming in from a particular angle; then we can say that yes,
> Virginia, there is a take off angle. We can reasonably expect that
> calling back through the same combination of delays through to those
> various antennas will result in a more optimum link.

I certainly expect that to be the case. But that little experiment I
ran a year or so ago made me not want to accept it without any reservation.

> That, or through this design, you can adjust to obtain that optimum
> (which will more than likely reveal another take off angle). You will
> then be able to ponder why they come in best at one angle while you go
> out best at another. Yes, a distinct possibility that becomes more
> distinct through this control, and the resolution of take off angles.

If the ionosphere was a static thing, I would expect the matter of
propagation would be pretty straightforward. Of course it isn't, and a
good thing, else some bands would be useless for certain purposes. But
if there is turbulence, I wouldn't be surprised to have the conditions
change over the course of time, perhaps on the time scales of a typical QSO.

> Now, as to the matter of this "some sort of blob that leaps off the
> antenna." Modeling propagation will reveal if you define a circuit
> (the point of origination and the intended audience's location), and
> you chip in the general antenna radiation lobe characteristic; then at
> significant distances a matter of one degree can be resolved. For
> sharply lobed antennas (and this 6 bay is quickly approaching that),
> the roll-off response and a one degree shift can plunge the listener
> into deafness. Of course, the vagaries of propagation can easily
> upset the apple cart - but again, this sharply reveals how "some sort
> of blob" has become distinctly important compared to the gross
> distribution of possibilities.

This setup might just be the ticket for exploring such.

- 73 de Mike KB3EIA -

27. Re: What is the BEST ladder line tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 15:23:02 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <5t71b35u5dh0rsj8tjuackli7ffpsulscc@4ax.com>
Source record: 37741

On Wed, 01 Aug 2007 14:46:35 -0000, Harry7 <cpa599@gmail.com> wrote:

>Danny,
>
>I've never built a balanced L tuner so I admit I'm speculating. The
>link coupled designs I've built seemed much easier & simpler
>mechanically & they will give 1:1 if the taps are in the right place.
>Just takes some intial fiddling to find the right places but once
>that's done you're good.
>
> I'll agree the double L's seem to be just as easy to tune but the
>building always deterred me.
>
>Have you ever measured the balance of your double L at various
>freqs. (current on each leg of the feedline)?
>
>Terry
>W8EJO

Terry,

I have not measured the current balanced on my feed line as the antenna system is not perfectly balance. Although my antenna is as geometrically balance as I can construct it, the environment where it is installed is not symmetrical . (Yard clutter, ground conditions and etc) That is a whole different topic but is explained very well here: http://k6mhe.com/sub/BalancedFeedLine.pdf

I have measured the balance of my antenna system by measuring the impedance for each leg. On twenty meters, for example, I am seeing about a 10% unbalance. http://k6mhe.com/sub/Balance_Z_L1_L2.gif

Additionally, checking feed line balance by measuring current using RF amp meters of each leg of open line will not accurate due the fact that RF amp meters do not give any phase information. Roy corrected me on that some time ago.

73,
Danny, K6MHE

28. ring capacity calculation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 15:42:47 UTC
From: lixiaoyao <liletian@gmail.com>
Message-ID: <1185982967.137423.221090@57g2000hsv.googlegroups.com>
Source record: 37742

Hi all
Does anyone happen to know how to calculate the capacity of two
rings(two cases, one case is placed in one plane, another case is
placed in parallel, I think this is a classical question, can anyone
give me a resource where I can find the results, thanks.

29. Re: What is the BEST ladder line tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 17:38:34 UTC
From: dplatt@radagast.org
Message-ID: <q1t6o4-o9j.ln1@radagast.org>
Source record: 37743

In article <1185968652.852705.148850@19g2000hsx.googlegroups.com>,
Harry7 <cpa599@gmail.com> wrote:

>The link coupled design of the Matchbox takes the balun (and it's
>potential for power loss) out of the circuit. They are also much
>simpler designs, easier to homebrew & tune.

The Z-match is another link-coupled design useful for driving balanced
feedlines. Compared to the Matchbox, its matching range may be
somewhat wider, especially if both low-Z and high-Z output links are
provided. I'm not sure how its losses compare to the Matchbox...
they'll probably vary depending on whether the Z-match uses an
air-core or toroidal-iron-core link.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

30. Re: What is the BEST ladder line tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-01 19:43:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13b1ojth8eu7q1c@corp.supernews.com>
Source record: 37744

Danny Richardson wrote:
> . . .
> Additionally, checking feed line balance by measuring current using
> RF amp meters of each leg of open line will not accurate due the fact
> that RF amp meters do not give any phase information. Roy corrected me
> on that some time ago.

The thing to do is run both conductors through a single ferrite core (type 43 is fine) -- you can squeeze them together or use a short piece of two close spaced two conductor wire. Wind a secondary of 10 turns, and terminate the secondary with about 50-100 ohms. Measure the secondary voltage with an RF voltmeter (diode, capacitor, and DVM) or scope. This directly measures the common mode current. Then compare that to the reading you get with only one of the conductors going through the core.

Roy Lewallen, W7EL

31. Re: Off-center fed dipole, fed with ladder line?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 00:51:07 UTC
From: afcsman <afcsman@hotmail.com>
Message-ID: <Vs-dnaeYCa7mtyzbnZ2dnUVZWhednZ2d@comcast.com>
Source record: 37745

Rick (W-A-one-R-K-T) wrote:
> On page 7-10 of the ARRL Antenna Book 20th Edition, there is a discussion
> of "Off-Center-Fed Dipoles". It shows a dipole 130 feet long, fed 45.3
> feet (a bit over 1/3 wavelength) from one end with a 4:1 balun, then coax
> to the shack, and used on 80 thru 20.
>
> I'm wondering if I can feed that with ladder line instead of coax and
> balun.
>
> It's not a "balanced" antenna (if there even is such a thing in the real
> world) so maybe ladder line isn't a good choice here, but it would make
> the installation a bit easier...
>
My experience with this antenna (fed with 300-ohm TV twinlead, which was all I could afford at age 16) was electrifying. Using a DX-20 transmitter, I was able to draw nice sparks on 20 mtrs. You may want to do some pruning to find a length that will keep RF out of the shack. My own preference would be to center-feed the 130-foot flat-top with ladder-line and use a link-coupled transmatch to work 80 through 10, including WARC, and not worry about coax losses. You'll be the proud owner of a "Zepp!"

73---W9NPI

32. Homebrew wifi antenna coax adapters

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 01:08:21 UTC
From: robert casey <wa2ise@ix.netcom.com>
Message-ID: <98asi.13044$tj6.7353@newsread4.news.pas.earthlink.net>
Source record: 37746

For some strange reason, wifi connectors are not compatible with normal SMA coax connectors. The center pin is a male in an otherwise female connector. And visa versa.

But you probably have accumulated a few wifi "rubber duck" antennas. Inside the plastic "duck" is just some thin teflon coax cable and a dipole antenna with a 1/4 wave shroud around the coax and 1/4 wave exposed center conductor. It's easy to separate the plastic duck off the antenna, just bend it at the joint just above the elbow and it should just pop off. Being teflon, you don't have to worry about melting it with the soldering iron. This coax looks to be 50 ohm impedance. Get a BNC connector and attach it like you would to coax of this thin type. To deal with the extra thin coax, I used a small solderable metal washer to give the shield clamping connector pieces (the funny looking washers) something to grab when you tighten the threaded on the outside bushing you tighten into the connector. As the connectors I had were meant for fatter coax. Don't forget to place the washers and such on the coax before you solder the washer to the coax shield.

As a test, I inserted two such adapters into the feedline for my wifi antenna, and looked at the wifi utility software window that reports signal strength, and saw no desernable extra signal loss (less than a dB). (I scrapped out a bad wifi booster module to get its reverse SMA connectors to get the mate for the antenna side connector)

Once you have built this adapter, you can then use regular good quality coax cable with BNC connectors (or N or other connector good for microwave work) to connect a homebrew wifi antenna to the wifi computer card. There's also a ham band that shares part of the wifi band, so we could conceivably run high gain high power ham to ham using wifi based equipment.

33. Re: Wants to poke out strong signal

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 01:11:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0ab2b3lj2u1bj41c70hqukplclkd3ooelg@4ax.com>
Source record: 37747

On Wed, 01 Aug 2007 11:06:38 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

>> However, returning to the original link, and the design behind it, it
>> is called beam forming as practiced through controlled delays.
>
> I'm curious about the technology to sense the incoming angle.

Hi Mike,

I've spent all day aboard the USS Bunker Hill and had a tour of their
phased array RADAR systems. They use roughly 4000 separate elements
with computer controlled delays to steer the beam anywhere they want
(within a quadrant as there are four panels). The 'tronics consume 3
decks of rack equipment.

>> If the
>> math reveals that a signal is peaked with one particular setting of a
>> combination of delays, and if that combination reveals an apparent
>> source coming in from a particular angle; then we can say that yes,
>> Virginia, there is a take off angle. We can reasonably expect that
>> calling back through the same combination of delays through to those
>> various antennas will result in a more optimum link.
>
> I certainly expect that to be the case. But that little experiment I
>ran a year or so ago made me not want to accept it without any reservation.

Just as well when you have only onsey-twosey variables to control. The
OP had 6 which raises the resolution (the Bunker Hill, 16000+).

>> That, or through this design, you can adjust to obtain that optimum
>> (which will more than likely reveal another take off angle). You will
>> then be able to ponder why they come in best at one angle while you go
>> out best at another. Yes, a distinct possibility that becomes more
>> distinct through this control, and the resolution of take off angles.
>
>If the ionosphere was a static thing, I would expect the matter of
>propagation would be pretty straightforward. Of course it isn't, and a
>good thing, else some bands would be useless for certain purposes. But
>if there is turbulence, I wouldn't be surprised to have the conditions
>change over the course of time, perhaps on the time scales of a typical QSO.

No argument there. With phase control you could follow the changes to
some degree (if the incoming signal sweeps out over the horizon, no
phase control is going to capture that).

>> Now, as to the matter of this "some sort of blob that leaps off the
>> antenna." Modeling propagation will reveal if you define a circuit
>> (the point of origination and the intended audience's location), and
>> you chip in the general antenna radiation lobe characteristic; then at
>> significant distances a matter of one degree can be resolved. For
>> sharply lobed antennas (and this 6 bay is quickly approaching that),
>> the roll-off response and a one degree shift can plunge the listener
>> into deafness. Of course, the vagaries of propagation can easily
>> upset the apple cart - but again, this sharply reveals how "some sort
>> of blob" has become distinctly important compared to the gross
>> distribution of possibilities.
>
>This setup might just be the ticket for exploring such.

Jerry, KD6JDJ, has offered a stable means to build a small physical
model and test these things. Consult the thread "Request EZNEC
computation."

73's
Richard Clark, KB7QHC

34. Re: Homebrew wifi antenna coax adapters

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 02:32:52 UTC
From: dplatt@radagast.org
Message-ID: <kbs7o4-qeq.ln1@radagast.org>
Source record: 37748

In article <98asi.13044$tj6.7353@newsread4.news.pas.earthlink.net>,
robert casey <wa2ise@ix.netcom.com> wrote:

>For some strange reason, wifi connectors are not compatible with normal
>SMA coax connectors. The center pin is a male in an otherwise female
>connector. And visa versa.

The "strange" reason is that the FCC requires it.

Part 15 devices, such as 802.11 cards, are supposed to be tested for
compliance and certificated by their manufacturer as a system (radio
and antenna together). Replacing the manufacturer-tested antenna with
a different one (higher gain, or perhaps different impedance) changes
the system's behavior, in a way which means that the tests done by the
manufacturer for Part 15 certification are no longer valid.

The FCC's position is that making such un-tested changes automatically
voids the Part 15 certification of the device, and it's no longer
technically legal to transmit using the modified device.

In order to (try to) deter people from making such arbitrary changes,
the FCC requires that makers of Part 15 radio cards with detachable
antennas use only connectors which are either proprietary, or are "not
generally available". Most manufacturers seem to have settled on
RP-SMA or RP-TNC connector for this purpose.

I've only heard of a very small number of cases (fingers-of-one-hand)
in which the FCC has cited someone for running non-certificated WiFi
equipment... and in the only case I can remember clearly, a
non-certificated amplifier was being used to push about 5 watts out
through an omnidirectional antenna, which is rather more than the
FCC's Part 15 ERP rules for WiFi will allow.

In practice, people using simple, commercially-provided "gain"
antennas with their commercial access points are probably safe
(especially if they buy the AP and antenna from the same vendor, as a
package which has been tested as a system). If you're concerned about
the potential legal risks, though, consult with a knowledgeable lawyer
(I'm not one).

> There's also a ham band that shares part of the wifi band, so we
>could conceivably run high gain high power ham to ham using wifi based
>equipment.

This does seem to be legal, as long as you're licensed, limit your
hopped-up transmissions to the small part of the WiFi band which
intersects the ham 13 cm band, and honor the ham-radio usage rules in

re ID'ing properly, no encryption for the purpose of concealing or
obscuring the transmission (which probably means no SSL), and no use
for purposes in which you have a significant financial interest.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

35. Re: 80+40 MTR Dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 13:21:53 UTC
From: Howard Kowall <hkowall@shaw.ca>
Message-ID: <RTksi.24369$rX4.18440@pd7urf2no>
Source record: 37749

Thanx To all who posted
howard
VE4ISP

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:f80si.1786$ox5.864@nlpi068.nbdc.sbc.com...
> Sal M. Onella wrote:
>> At the two points where you need to open the elements, insert pull-chain
>> operated switches.
>
> My approach, in the early 50's, was not elegant but
> it worked and it was fast. I had insulators at the
> mid-point of each leg of the 80m dipole with a jumper
> wire across them for 80m operation. The dipole was
> on pulleys. It only took about three minutes to let
> the dipole down, either attach or unattach one end
> of the jumper wires, and pull the dipole back up.
> Making 50 cents an hour working at Carter's Grocery
> on Saturday limited my resources. :-)
> --
> 73, Cecil http://www.w5dxp.com

36. Re: Homebrew wifi antenna coax adapters

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 14:58:32 UTC
From: Bob Spooner <rls19@psu.edu>
Message-ID: <f8sreo$1g9k$1@f04n12.cac.psu.edu>
Source record: 37750

"robert casey" <wa2ise@ix.netcom.com> wrote in message
news:98asi.13044$tj6.7353@newsread4.news.pas.earthlink.net...
> For some strange reason, wifi connectors are not compatible with normal
> SMA coax connectors. The center pin is a male in an otherwise female
> connector. And visa versa.
>
> ... Being teflon, you don't have to worry about melting it with the
> soldering iron. ...
>
Just be careful when working with teflon. NASA rules require that thermal
stripping of teflon wire be done in a hood because the fumes are poisonous.

73,
Bob AD3K

37. Re: Homebrew wifi antenna coax adapters

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 15:42:58 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <6Ymsi.1483$BQ.459@trnddc03>
Source record: 37751

"robert casey" <wa2ise@ix.netcom.com> wrote in message
news:98asi.13044$tj6.7353@newsread4.news.pas.earthlink.net...
> For some strange reason, wifi connectors are not compatible with normal
> SMA coax connectors. The center pin is a male in an otherwise female
> connector. And visa versa.
>
> But you probably have accumulated a few wifi "rubber duck" antennas.
> Inside the plastic "duck" is just some thin teflon coax cable and a dipole
> antenna with a 1/4 wave shroud around the coax and 1/4 wave exposed center
> conductor. It's easy to separate the plastic duck off the antenna, just
> bend it at the joint just above the elbow and it should just pop off.
> Being teflon, you don't have to worry about melting it with the soldering
> iron. This coax looks to be 50 ohm impedance. Get a BNC connector and
> attach it like you would to coax of this thin type. To deal with the
> extra thin coax, I used a small solderable metal washer to give the shield
> clamping connector pieces (the funny looking washers) something to grab
> when you tighten the threaded on the outside bushing you tighten into the
> connector. As the connectors I had were meant for fatter coax. Don't
> forget to place the washers and such on the coax before you solder the
> washer to the coax shield.
>
> As a test, I inserted two such adapters into the feedline for my wifi
> antenna, and looked at the wifi utility software window that reports
> signal strength, and saw no desernable extra signal loss (less than a dB).
> (I scrapped out a bad wifi booster module to get its reverse SMA
> connectors to get the mate for the antenna side connector)
>
> Once you have built this adapter, you can then use regular good quality
> coax cable with BNC connectors (or N or other connector good for microwave
> work) to connect a homebrew wifi antenna to the wifi computer card.
> There's also a ham band that shares part of the wifi band, so we could
> conceivably run high gain high power ham to ham using wifi based
> equipment.

Hi Robert

I'd like to know more about how well your extended range WiFi performs.
What type of antenna seems to be the most effective?
Why did you decide to not use a reverse SMA adapter like ShowMeCables
sells for about $5.00?
How do you measure "signal loss" to within a dB?

Jerry

38. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 17:22:59 UTC
From: a?n?g?e?l@lovergirl.lrigrevol.moc.com
Message-ID: <46b21241.114780312@news.singnet.com.sg>
Source record: 37752
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

On Sat, 28 Jul 2007 12:07:49 -0700, Radium <glucegen1x@excite.com>
wrote:

>On Usenet, the text-equivalent of my disability is probably noticed. I
>do apologize profusely, for any inconvenience it causes.
>
>Thank you very much in advance for your understanding, cooperation,
>and assistance.

No prob at all, one of my friend has Asperger. He's pretty smart
though and never had any problems seeing sense or nonsense for that
matter. Also one of the best person I've gotten to know from the net,
although admittedly he claims he does better online than in life. =P

--
A Lost Angel, fallen from heaven
Lost in dreams, Lost in aspirations,
Lost to the world, Lost to myself

39. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 17:35:37 UTC
From: Tim May <timcmay@removethis.got.net>
Message-ID: <020820071035379225%timcmay@removethis.got.net>
Source record: 37753
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

In article <46b21241.114780312@news.singnet.com.sg>, The little lost angel <a?n?g?e?l@lovergirl.lrigrevol.moc.com> wrote:

> On Sat, 28 Jul 2007 12:07:49 -0700, Radium <glucegen1x@excite.com>
> wrote:
>
> >On Usenet, the text-equivalent of my disability is probably noticed. I
> >do apologize profusely, for any inconvenience it causes.
> >
> >Thank you very much in advance for your understanding, cooperation,
> >and assistance.
>
> No prob at all, one of my friend has Asperger. He's pretty smart
> though and never had any problems seeing sense or nonsense for that
> matter. Also one of the best person I've gotten to know from the net,
> although admittedly he claims he does better online than in life. =P

I don't know about your friend, but most "Asperger's Syndrome" diagnoses are self-diagnoses. The number of proclaimed AS cases has gone up by a factor of 20 since 1980.

It's the trendy self-diagnosis, much the way "Chronic Fatigue Syndrome" is.

As in:

"He's a genius, but he plays Worlds of Warcraft all day in his mother's rec room because he's got Asperger's. So sad."

"I can't work and am on permanent disability because of Chronic Fatigue."

Add to this the casual self-diagnoses--or diagnoses with the help of a suitably-chosen doctor--of "Attention Deficit Disorder" (ADD and ADHD) and "Bipoloar Disorder," and one sees that society is providing many excuses for failure.

We taxpayers are expected to work harder and longer to pay for the upkeep of a rapidly-expanding number of AS, CFS, ADHD, and BD layabouts.

--Tim May

40. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 18:01:51 UTC
From: Steve <sdaniel13@speakeasy.net>
Message-ID: <1186077711.533594.137110@g12g2000prg.googlegroups.com>
Source record: 37754
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

On Aug 2, 1:35 pm, Tim May <timc...@removethis.got.net> wrote:
> In article <46b21241.114780...@news.singnet.com.sg>, The little lost
>
> angel <a?n?g?...@lovergirl.lrigrevol.moc.com> wrote:
> > On Sat, 28 Jul 2007 12:07:49 -0700, Radium <glucege...@excite.com>
> > wrote:
>
> > >On Usenet, the text-equivalent of my disability is probably noticed. I
> > >do apologize profusely, for any inconvenience it causes.
>
> > >Thank you very much in advance for your understanding, cooperation,
> > >and assistance.
>
> > No prob at all, one of my friend has Asperger. He's pretty smart
> > though and never had any problems seeing sense or nonsense for that
> > matter. Also one of the best person I've gotten to know from the net,
> > although admittedly he claims he does better online than in life. =P
>
> I don't know about your friend, but most "Asperger's Syndrome"
> diagnoses are self-diagnoses. The number of proclaimed AS cases has
> gone up by a factor of 20 since 1980.
>
> It's the trendy self-diagnosis, much the way "Chronic Fatigue Syndrome"
> is.
>
> As in:
>
> "He's a genius, but he plays Worlds of Warcraft all day in his mother's
> rec room because he's got Asperger's. So sad."
>
> "I can't work and am on permanent disability because of Chronic
> Fatigue."
>
> Add to this the casual self-diagnoses--or diagnoses with the help of a
> suitably-chosen doctor--of "Attention Deficit Disorder" (ADD and ADHD)
> and "Bipoloar Disorder," and one sees that society is providing many
> excuses for failure.
>
> We taxpayers are expected to work harder and longer to pay for the
> upkeep of a rapidly-expanding number of AS, CFS, ADHD, and BD
> layabouts.
>
> --Tim May

And don't forget all the pharmaceutical money to be made off of these "conditions". Think of all those school kids out there getting ritalin along with their milk and cookies. $$$$$$$$$$

41. Re: Need Copy of Manual for Dymek DA-9 and Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 18:38:05 UTC
From: jvcactus@yahoo.com
Message-ID: <93806$46b22493$97d5b88f$23092@ALLTEL.NET>
Source record: 37755
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

Thanks for the replies. I was able to get one from Mike at
www.Esotericsound.com He is s great guy and has a lot of really interesting
used gear. Check it out.
Thanks RHF for the suggestion. Roadie you were right Universal President has
a lot of manuals but wasno help in this matter.
Really a[ppreciate the help.
Regards
Jack WN5A

42. Re: Wants to poke out strong signal

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 19:16:43 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <f8tais$1fha$1@f04n12.cac.psu.edu>
Source record: 37756

nm5k@wt.net wrote:
> On Jul 31, 2:45 pm, Michael Coslo <m...@psu.edu> wrote:
>
>> What I did learn was that at any given moment, either the vertical or
>> the horizontal antenna was "the best". While some generalizations could
>> be made for distance and the angle the signal was likely coming in at,
>> there was a lot of variation within it. The difference could vary over
>> time also.
>
> I did the same thing at one time on 40m. "Compared a 1/4 WL ground
> plane vs a horizontal dipole. You see some strange things at times.
> The distance of the path has a large bearing over which is best.
> In my case, 800 miles seemed to be about the crossover point
> where both would be about the same on peaks. But even then,
> sometimes you will see peaks on the vertical that are the strongest.
> The ionosphere seems to tumble back and forth.
> On the longer paths at say 1500 miles, the peaks on the vertical
> would almost always be the strongest. And the farther the distance out,
> the larger the difference would be.

That was similar to my findings. The vertical seemed to have generally
better performance, esp on receive. It seemed noisier, but its possible
that that was because everything was louder. That will be another
experiment for another day. 80 meters was very interesting. There were a
few signals that were barely readable on the one antenna, but solid copy
on the other. I did not get to try it above 20 meters, as those bands
were pretty quiet at the time.

>> That being the case, I questioned if assuming that the angle for best
>> reception is also the angle for best transmission, especially with what
>> appears to be a change over time.
>
> I think it's quite accurate.. I use my switch and compare.. Whichever
> receives the best signal gets the nod as far as transmit.
> BTW, my vertical was pretty good compared to many you see...
> Was full sized, with the base at 36 ft with sloping radials. Not much
> loss involved compared to some you see on the ground with a
> few meager radials.. It was a lot better than the 1/4 wave I had
> ground mounted with 32 radials. It would always seem just as "hot" as
> my dipole on receive. It was
> just vertical. So it's quite possible for a lesser vertical not to see
> the results I had. As an example, the ground mount with 32 radials
> was barely better than the dipole to CA. You didn't see the 2 S unit
> difference as on the elevated GP I used later. So in the case of
> the ground mount, the distance where it would overtake the

> horizontal antenna on peaks would be farther out, vs the GP.

My Butternut has a fair radial system. Probably around the 32 you mention. I'm embarrassed to say that I lost count of how many I have. I'd just get a weekend free, and lay down a few more radials until my back and knees start barking at me. Nothing as nice as a full size vertical though.

- 73 de Mike KB3EIA -

43. Re: Homebrew wifi antenna coax adapters

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 19:50:59 UTC
From: Tehrasha Darkon <darkon@netins.net>
Message-ID: <pan.2007.08.02.19.51.00@netins.net>
Source record: 37757

On Thu, 02 Aug 2007 10:58:32 -0400, Bob Spooner wrote:

> Just be careful when working with teflon. NASA rules require that
> thermal stripping of teflon wire be done in a hood because the fumes are
> poisonous.

Watermellons are dangerous too. If you feed one to a lab rat too
quickly, it will explode! So be extra careful when eating watermellons.

The average Joe_User, thermally stripping teflon coax at his work bench,
is not in any more danger than he is when breathing the solder fumes and
flux smoke of any other job. If it were his 9to5 job, that would be a
completely different story...

--Teh

44. Re: Grounding systems -- need the help of some good elmers

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 19:55:05 UTC
From: a.richman@btinternet.com
Message-ID: <1186084505.329436.168040@d30g2000prg.googlegroups.com>
Source record: 37758

All

I now want to piggyback onto the earlier discussion as i face an even more difficult siting / grounding issue. I have just installed a 1/2 wave G5RV dipole at approx. 30 ft above ground. My shack is in the back of the house but on the second floor (effectively in the roof of the house) above the garden but due to the house design i think i would struggle to have a RF ground wire of less than 30-40 feet.

Based on above discussions should I :

1) fit a ground rod and run this up to the shack even though its a long way up along various walls

2) buy an articial ground unit such as the MFJ-931

3) forget about it and make do without a ground.

I am pretty thoroughly confused.

Thanks

Andy

45. Re: Homebrew wifi antenna coax adapters

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 20:10:03 UTC
From: robert casey <wa2ise@ix.netcom.com>
Message-ID: <vSqsi.14508$zA4.8866@newsread3.news.pas.earthlink.net>
Source record: 37759

>
> I'd like to know more about how well your extended range WiFi performs.
> What type of antenna seems to be the most effective?
> Why did you decide to not use a reverse SMA adapter like ShowMeCables
> sells for about $5.00?
> How do you measure "signal loss" to within a dB?
>
I'm taking the word of the wifi utility program, which appears to be
reasonably believable. Didn't know about ShowMeCables.

46. Re: Homebrew wifi antenna coax adapters

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 20:20:06 UTC
From: robert casey <wa2ise@ix.netcom.com>
Message-ID: <W%qsi.13999$Od7.10302@newsread1.news.pas.earthlink.net>
Source record: 37760

> non-certificated amplifier was being used to push about 5 watts out
> through an omnidirectional antenna, which is rather more than the
> FCC's Part 15 ERP rules for WiFi will allow.

That's like a 2m repeater being an alligator, unless that setup had a
good preamp on receive.
>
> In practice, people using simple, commercially-provided "gain"
> antennas with their commercial access points are probably safe
> (especially if they buy the AP and antenna from the same vendor, as a
> package which has been tested as a system).

That's basically what I have, except I needed a longer coax cable
between the wifi board in the computer to the directional antenna from
Hawking. And nobody around here sells the damm extension cables
anymore. But that won't stop a ham....
>
>> There's also a ham band that shares part of the wifi band, so we
>>could conceivably run high gain high power ham to ham using wifi based
>>equipment.
>
>
> This does seem to be legal, as long as you're licensed, limit your
> hopped-up transmissions to the small part of the WiFi band which
> intersects the ham 13 cm band, and honor the ham-radio usage rules in
> re ID'ing properly, no encryption for the purpose of concealing or
> obscuring the transmission (which probably means no SSL), and no use
> for purposes in which you have a significant financial interest.

I haven't checked, but if you have all security features disabled (WEP
and such) and name your computer wifi setup (peer to peer mode) with
your callsign, that might be all you need to do for ID, as wifi is a
widely recognized RF standard, like packet radio.

Also no pecuniary interest material, and no indecent material.
>

47. Re: Grounding systems -- need the help of some good elmers

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 20:35:08 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <rqf4b3tabijfb753gp7k6o01nkmnn2cn29@4ax.com>
Source record: 37761

On Thu, 02 Aug 2007 12:55:05 -0700, a.richman@btinternet.com wrote:

>All
>
>I now want to piggyback onto the earlier discussion as i face an even
>more difficult siting / grounding issue. I have just installed a 1/2
>wave G5RV dipole at approx. 30 ft above ground. My shack is in the
>back of the house but on the second floor (effectively in the roof of
>the house) above the garden but due to the house design i think i
>would struggle to have a RF ground wire of less than 30-40 feet.
>
>Based on above discussions should I :
>
>1) fit a ground rod and run this up to the shack even though its a
>long way up along various walls
>
>2) buy an articial ground unit such as the MFJ-931
>
>3) forget about it and make do without a ground.
>
>I am pretty thoroughly confused.
>
>Thanks
>
>Andy

The G5RV dipole is a balanced antenna and does not require a ground.
So unless you want one for some other reason, option 3...

bob
k5qwg

48. Re: Grounding systems -- need the help of some good elmers

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 21:14:42 UTC
From: Ron in Radio Heaven <kc4yoy@Xcarolina.rr.com>
Message-ID: <46b24948$0$29696$4c368faf@roadrunner.com>
Source record: 37762

Bob Miller wrote:

> The G5RV dipole is a balanced antenna and does not require a ground.
> So unless you want one for some other reason, option 3...
> bob
> k5qwg

And they work GREAT. I've worked stations all over the
world with one and a barefoot TS-520S.

73, Ron kc4yoy

49. Re: Grounding systems -- need the help of some good elmers

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 21:16:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13b4idnlelfnacf@corp.supernews.com>
Source record: 37763

Bob Miller wrote:
>
> The G5RV dipole is a balanced antenna and does not require a ground.
> So unless you want one for some other reason, option 3...

The G5RV is a *symmetrical* antenna. Feedline radiation can still occur, and often does. In that case, the antenna isn't *balanced*, in the sense that the current on the two antenna halves isn't equal.

See Figs. 2-4 in http://eznec.com/Amateur/Articles/Baluns.pdf.

You need a truly balanced tuner in conjunction with the G5RV to assure balance. A good current balun, instead of a balanced tuner, might be adequate on bands where the input impedance is reasonable.

Roy Lewallen, W7EL

50. Re: Homebrew wifi antenna coax adapters

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 22:50:43 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <7dtsi.6380$2c6.1122@trnddc01>
Source record: 37764

"robert casey" <wa2ise@ix.netcom.com> wrote in message
news:vSqsi.14508$zA4.8866@newsread3.news.pas.earthlink.net...
>
>>
>> I'd like to know more about how well your extended range WiFi performs.
>> What type of antenna seems to be the most effective?
>> Why did you decide to not use a reverse SMA adapter like ShowMeCables
>> sells for about $5.00?
>> How do you measure "signal loss" to within a dB?
>>
> I'm taking the word of the wifi utility program, which appears to be
> reasonably believable. Didn't know about ShowMeCables.

Hi Robert

I have been looking for "software" that provides read-out to show WiFi
signal strength. Can you tell me more about your "wifi utility program"?

I noticed that you intend to use a coax cable to connect the WiFi antenna
to the Computer. Would it be difficult for you to locate the Router or
access point at the antenna so the coax will be shorter?

Jerry

51. Re: Need Copy of Manual for Dymek DA-9 and Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 22:51:39 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1186095099.923086.302560@e16g2000pri.googlegroups.com>
Source record: 37765
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

On Aug 2, 11:38 am, jvcac...@yahoo.com wrote:
> Thanks for the replies. I was able to get one from Mike atwww.Esotericsound.com He is s
great guy and has a lot of really interesting
> used gear. Check it out.
> Thanks RHF for the suggestion. Roadie you were right Universal President has
> a lot of manuals but wasno help in this matter.
> Really a[ppreciate the help.
> Regards
> Jack WN5A

Jack [WN5A],

Post the Results of your "Findings" here on RRS
and become a Resource for some one with a
problem with one of the McKay Dymek Active
Antennas in the future.

And post a Copy of your Results and Findings to
the "Loop Antenna" Group on YAHOO !
GoTo=> http://groups.yahoo.com/group/loopantennas/
They are also a Resource for all kinds of Loop
Antennas Questions, Problems and Issues.

hope this helps - iane ~ RHF
.
.
. .

52. Re: Grounding systems -- need the help of some good elmers

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-02 22:52:13 UTC
From: Andiroo <a.richman@btinternet.com>
Message-ID: <1186095133.054049.14870@x40g2000prg.googlegroups.com>
Source record: 37766

Thanks for swift responses - in which case do i just need a DC earth
up from the ground floor or can i get away with a radiator pipe etc.

Andy

53. Re: Homebrew wifi antenna coax adapters

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 01:03:41 UTC
From: robert casey <wa2ise@ix.netcom.com>
Message-ID: <46B270C9.5030906@ix.netcom.com>
Source record: 37767

>
> I have been looking for "software" that provides read-out to show WiFi signal strength. Can you tell me more about your "wifi utility program"?

There's "Net Stumbler" that will give you a time/signal strength graph.
It's what the wifi card reports.
Did a google search,found it at
http://www.netstumbler.com/downloads/

>
> I noticed that you intend to use a coax cable to connect the WiFi antenna to the Computer. Would it be difficult for you to locate the Router or access point at the antenna so the coax will be shorter?
>
That would actually be the better way to go, as there'd be less loss in the coax. But I'd have to change a lot of things in the physical layout of my shack...

54. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 04:04:51 UTC
From: a?n?g?e?l@lovergirl.lrigrevol.moc.com
Message-ID: <46b2a82f.153162390@news.singnet.com.sg>
Source record: 37768
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

On Thu, 02 Aug 2007 10:35:37 -0700, Tim May
<timcmay@removethis.got.net> wrote:

>I don't know about your friend, but most "Asperger's Syndrome"
>diagnoses are self-diagnoses. The number of proclaimed AS cases has
>gone up by a factor of 20 since 1980.

In his case, he went through quite a lot of examinations before the
diagnosis was made so I doubt it was self diagnosis. Frankly most of
us are clinically insane one way or another, if not many ways, so I
don't really care if my friends has AS or BS, there's no excuse for
being mean or stupid as a result of being too lazy to think =P

--
A Lost Angel, fallen from heaven
Lost in dreams, Lost in aspirations,
Lost to the world, Lost to myself

55. Re: Wants to poke out strong signal

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 11:20:18 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
Message-ID: <46b30eea$0$20612$4c368faf@roadrunner.com>
Source record: 37769

Richard Clark wrote:
> On Wed, 01 Aug 2007 11:06:38 -0400, Michael Coslo <mjc5@psu.edu>
> wrote:
>
>
>>>However, returning to the original link, and the design behind it, it
>>>is called beam forming as practiced through controlled delays.
>>
>> I'm curious about the technology to sense the incoming angle.
>
>
> Hi Mike,
>
> I've spent all day aboard the USS Bunker Hill and had a tour of their
> phased array RADAR systems. They use roughly 4000 separate elements
> with computer controlled delays to steer the beam anywhere they want
> (within a quadrant as there are four panels). The 'tronics consume 3
> decks of rack equipment.

Just WOW! What a fun toy.

Chris

56. Help, phasing 2.4Ghz Double quad

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 12:44:29 UTC
From: amdx <amdx@knology.net>
Message-ID: <18ae7$46b32330$18d6b40c$16678@KNOLOGY.NET>
Source record: 37770
Cross-posted to: rec.radio.amateur.antenna,alt.internet.wireless,comp.sys.laptops

I'd like to build the antenna from the following page;

http://www.frars.org.uk/cgi-bin/render.pl?action=link&url=1162&goback=1064

But there are a few details I need to sort out before I try.

1) It uses UT141, Could I sub 9913?

2) Or, should I use the copper tube method shown here,

http://martybugs.net/wireless/biquad/

3) The author states:

"Next, cut four pieces of UT141 coax 80mm long, and strip 1.5mm of outer
from each end, leaving a total outside length of 77mm. These will form part
of the phasing assembly. Follow the diagram as to the connection of these
pieces of coax. Connection of two double quads in parallel will result in an
impedance of 25 ohms."

Please view >4double quad back jpg< at bottom of page as reference.

I assume he's describing the 77mm pieces that run at a 45* angles, however
the picture does not show

UT141 coax as he describes.

4) Again the author states:

" Next for the 25ohm to 100 ohm matching sections, cut two pieces of 61mm
UT141, again strip the outer back 1.5mm from each end to leave a outside
length of 58mm. Of course 2 100 ohm coax's in parallel will result in an
impedance of 50 ohms. Connect each piece to the joined 77mm lengths as per
the diagram. Under the connector, both centre conductors from the 58mm
lengths are connected to the centre pin of the SMA socket. Solder the outer
of these lengths to the SMA socket body to ensure a good earth connection."

Again he says use UT141 but I don't see it in the picture.

I'm looking forward to your input!

Thanks, Mike

57. Re: Off-center fed dipole, fed with ladder line?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 12:53:14 UTC
From: hasan schiers <schiers@netins.net>
Message-ID: <f8v8ffgsh1@news.netins.net>
Source record: 37771

The whole idea of the OCF is to moderate the wild excursions of impedance that is so typical of a center fed antenna operated at even harmonics. I've used both over the years (OCF and Center Fed). I prefer the OCF for general use and the balanced fed dipole for best overall performance. I will say the impedance excursions of the dipole were annoying (of course, one can always employs Cecil's trick and avoid the problem completely). Cecil approach, while effective, makes the entire project more and more complicated.

For a "throw it up and use it" approach, the coax fed OCF is hard to beat. It works and presents impedances that are typically handled quite easily by even the minimal tuners incorporated into many of today's radios. I use a 135' OCF and have no trouble matching it at all (it's a CW-80 Carolina Windom). I have found its performance on 80/40/30 to be quite good.

...hasan, N0AN

"afcsman" <afcsman@hotmail.com> wrote in message
news:Vs-dnaeYCa7mtyzbnZ2dnUVZWhednZ2d@comcast.com...
> Rick (W-A-one-R-K-T) wrote:
>> On page 7-10 of the ARRL Antenna Book 20th Edition, there is a discussion
>> of "Off-Center-Fed Dipoles". It shows a dipole 130 feet long, fed 45.3
>> feet (a bit over 1/3 wavelength) from one end with a 4:1 balun, then coax
>> to the shack, and used on 80 thru 20.
>>
>> I'm wondering if I can feed that with ladder line instead of coax and
>> balun.
>>
>> It's not a "balanced" antenna (if there even is such a thing in the real
>> world) so maybe ladder line isn't a good choice here, but it would make
>> the installation a bit easier...
>>
> My experience with this antenna (fed with 300-ohm TV twinlead, which was
> all I could afford at age 16) was electrifying. Using a DX-20
> transmitter, I was able to draw nice sparks on 20 mtrs. You may want to
> do some pruning to find a length that will keep RF out of the shack. My
> own preference would be to center-feed the 130-foot flat-top with
> ladder-line and use a link-coupled transmatch to work 80 through 10,
> including WARC, and not worry about coax losses. You'll be the proud owner
> of a "Zepp!"
>
> 73---W9NPI

58. Re: Homebrew wifi antenna coax adapters

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 13:18:01 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <f8v9ug$12j2$1@f04n12.cac.psu.edu>
Source record: 37772

Tehrasha Darkon wrote:
> On Thu, 02 Aug 2007 10:58:32 -0400, Bob Spooner wrote:
>
>> Just be careful when working with teflon. NASA rules require that
>> thermal stripping of teflon wire be done in a hood because the fumes are
>> poisonous.
>
> Watermellons are dangerous too. If you feed one to a lab rat too
> quickly, it will explode! So be extra careful when eating watermellons.

You might want to read this one:

http://www.mikeholt.com/documents/mojofiles/DuPontTeflonFEP2003MSDS.pdf

I'll take the watermelon over teflon fumes any day.

- 73 de Mike KB3EIA -

59. antenna attachment on wifi adapter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 14:14:06 UTC
From: amdx <amdx@knology.net>
Message-ID: <74421$46b33830$18d6b40c$21655@KNOLOGY.NET>
Source record: 37773
Cross-posted to: rec.radio.amateur.antenna,alt.internet.wireless,comp.sys.laptops

I have posted a picture on
alt.binaries.schematics.electronic
of a wifi adapter. I'd like to add a 50 ohm
external antenna to the adapter.
I'd like opinions of the proper placement.
Thanks,
Mike

Note: If you don't have access to
alt.binaries.schematics.electronic
Please go on to other posts.

60. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 15:07:56 UTC
From: johannes <johs@size-nospamme84764-fitter.com>
Message-ID: <46B344CC.FAD8F245@size-nospamme84764-fitter.com>
Source record: 37774
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

The little lost angel wrote:
>
> On Thu, 02 Aug 2007 10:35:37 -0700, Tim May
> <timcmay@removethis.got.net> wrote:
>
> >I don't know about your friend, but most "Asperger's Syndrome"
> >diagnoses are self-diagnoses. The number of proclaimed AS cases has
> >gone up by a factor of 20 since 1980.
>
> In his case, he went through quite a lot of examinations before the
> diagnosis was made so I doubt it was self diagnosis. Frankly most of
> us are clinically insane one way or another, if not many ways, so I
> don't really care if my friends has AS or BS, there's no excuse for
> being mean or stupid as a result of being too lazy to think =P

Since Asperger's is is described as a mild form of Autism, it leaves
a lot of doors open for diagnosis. In fact any circumscribed area of
interest: cars, computers, trains, meteorology and astrononi...etc.
could be a symptom of Asperger's http://www.aspergers.com/aspclin.htm
Any nerd characteristics is certainly very suspect. Anyone who dives
into one particular subject. Doing math is certainly a health hazard.

I sometimes wonder if all this really comes from some dissatisfaction
by others who would like to get closer to the sufferer, but doesn't
quite catch their imagination. Hence it's as much other people's
problem as the sufferers. There should be an Asperger's contact
deficiency syndrome...

61. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 16:07:46 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1186157266.990324.194490@m37g2000prh.googlegroups.com>
Source record: 37775
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

On Aug 2, 2:35 pm, Tim May <timc...@removethis.got.net> wrote:
> In article <46b21241.114780...@news.singnet.com.sg>, The little lost
>
> angel <a?n?g?...@lovergirl.lrigrevol.moc.com> wrote:
> > On Sat, 28 Jul 2007 12:07:49 -0700, Radium <glucege...@excite.com>
> > wrote:
>
> > >On Usenet, the text-equivalent of my disability is probably noticed. I
> > >do apologize profusely, for any inconvenience it causes.
>
> > >Thank you very much in advance for your understanding, cooperation,
> > >and assistance.
>
> > No prob at all, one of my friend has Asperger. He's pretty smart
> > though and never had any problems seeing sense or nonsense for that
> > matter. Also one of the best person I've gotten to know from the net,
> > although admittedly he claims he does better online than in life. =P
>
> I don't know about your friend, but most "Asperger's Syndrome"
> diagnoses are self-diagnoses. The number of proclaimed AS cases has
> gone up by a factor of 20 since 1980.
>
> It's the trendy self-diagnosis, much the way "Chronic Fatigue Syndrome"
> is.
>
> As in:
>
> "He's a genius, but he plays Worlds of Warcraft all day in his mother's
> rec room because he's got Asperger's. So sad."
>
> "I can't work and am on permanent disability because of Chronic
> Fatigue."
>
> Add to this the casual self-diagnoses--or diagnoses with the help of a
> suitably-chosen doctor--of "Attention Deficit Disorder" (ADD and ADHD)
> and "Bipoloar Disorder," and one sees that society is providing many
> excuses for failure.
>
> We taxpayers are expected to work harder and longer to pay for the
> upkeep of a rapidly-expanding number of AS, CFS, ADHD, and BD
> layabouts.
>
> --Tim May

Wow! Tim, you may have figured where SSI went wrong - they're now accepting self diagnoses of disabilities.

Maybe we can head this thing off by requiring an MD diagnoses!!!

62. Re: Help, phasing 2.4Ghz Double quad

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 17:22:38 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <yvJsi.35$zg3.14@trnddc04>
Source record: 37776
Cross-posted to: rec.radio.amateur.antenna,alt.internet.wireless,comp.sys.laptops

"amdx" <amdx@knology.net> wrote in message
news:18ae7$46b32330$18d6b40c$16678@KNOLOGY.NET...
> I'd like to build the antenna from the following page;
>
> http://www.frars.org.uk/cgi-bin/render.pl?action=link&url=1162&goback=1064
>
> But there are a few details I need to sort out before I try.
>
>
>
> 1) It uses UT141, Could I sub 9913?
>
> 2) Or, should I use the copper tube method shown here,
>
> http://martybugs.net/wireless/biquad/
>
> 3) The author states:
>
> "Next, cut four pieces of UT141 coax 80mm long, and strip 1.5mm of
> outer from each end, leaving a total outside length of 77mm. These will
> form part of the phasing assembly. Follow the diagram as to the connection
> of these pieces of coax. Connection of two double quads in parallel will
> result in an impedance of 25 ohms."
>
>
>
> Please view >4double quad back jpg< at bottom of page as reference.
>
>
>
> I assume he's describing the 77mm pieces that run at a 45* angles, however
> the picture does not show
>
> UT141 coax as he describes.
>
>
>
> 4) Again the author states:
>
> " Next for the 25ohm to 100 ohm matching sections, cut two pieces of 61mm
> UT141, again strip the outer back 1.5mm from each end to leave a outside
> length of 58mm. Of course 2 100 ohm coax's in parallel will result in an
> impedance of 50 ohms. Connect each piece to the joined 77mm lengths as per

> the diagram. Under the connector, both centre conductors from the 58mm
> lengths are connected to the centre pin of the SMA socket. Solder the
> outer of these lengths to the SMA socket body to ensure a good earth
> connection."
>
>
>
> Again he says use UT141 but I don't see it in the picture.
>
>
>
> I'm looking forward to your input!
>
> Thanks, Mike

Hi Mike

You have given some great reference sites. Thanks.
If *I* was intending to feed two 25 ohm loads to a 50 ohm line, I'd
consider a series connection rather than transforming with a balanced line
transformer.
Besides, I didnt follow how the transforming of 25 ohms on a 100 ohm line
produced an impedance that is appropriate for matching to 50 ohms. But, I
havent studied the electrical equivalent lengths of the coax lengths.

Jerry

63. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 17:39:05 UTC
From: Mark@TayleorRobesin.org
Message-ID: <g0q6b3de8egq7g8ttqqqjdlvpbs52gcoc2@4ax.com>
Source record: 37777
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

On Fri, 03 Aug 2007 16:07:56 +0100, johannes
<johs@size-nospamme84764-fitter.com> wrote:

>
>
>The little lost angel wrote:
>>
>> On Thu, 02 Aug 2007 10:35:37 -0700, Tim May
>> <timcmay@removethis.got.net> wrote:
>>
>> >I don't know about your friend, but most "Asperger's Syndrome"
>> >diagnoses are self-diagnoses. The number of proclaimed AS cases has
>> >gone up by a factor of 20 since 1980.
>>
>> In his case, he went through quite a lot of examinations before the
>> diagnosis was made so I doubt it was self diagnosis. Frankly most of
>> us are clinically insane one way or another, if not many ways, so I
>> don't really care if my friends has AS or BS, there's no excuse for
>> being mean or stupid as a result of being too lazy to think =P
>
>Since Asperger's is is described as a mild form of Autism, it leaves
>a lot of doors open for diagnosis. In fact any circumscribed area of
>interest: cars, computers, trains, meteorology and astrononi...etc.
>could be a symptom of Asperger's http://www.aspergers.com/aspclin.htm
>Any nerd characteristics is certainly very suspect. Anyone who dives
>into one particular subject. Doing math is certainly a health hazard.
>
>I sometimes wonder if all this really comes from some dissatisfaction
>by others who would like to get closer to the sufferer, but doesn't
>quite catch their imagination. Hence it's as much other people's
>problem as the sufferers. There should be an Asperger's contact
>deficiency syndrome...

is there a point here other than vent some hatred you feel man

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

64. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 17:40:53 UTC
From: Mark@TayleorRobesin.org
Message-ID: <d2q6b3d1lqe9ib2fhhvjtjfsddg5bg7vtt@4ax.com>
Source record: 37778
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

On Fri, 03 Aug 2007 09:07:46 -0700, hot-ham-and-cheese@hotmail.com
wrote:

>On Aug 2, 2:35 pm, Tim May <timc...@removethis.got.net> wrote:
>> In article <46b21241.114780...@news.singnet.com.sg>, The little lost
>>
>> angel <a?n?g?...@lovergirl.lrigrevol.moc.com> wrote:
>> > On Sat, 28 Jul 2007 12:07:49 -0700, Radium <glucege...@excite.com>
>> > wrote:
>>
>> > >On Usenet, the text-equivalent of my disability is probably noticed. I
>> > >do apologize profusely, for any inconvenience it causes.
>>
>> > >Thank you very much in advance for your understanding, cooperation,
>> > >and assistance.
>>
>> > No prob at all, one of my friend has Asperger. He's pretty smart
>> > though and never had any problems seeing sense or nonsense for that
>> > matter. Also one of the best person I've gotten to know from the net,
>> > although admittedly he claims he does better online than in life. =P
>>
>> I don't know about your friend, but most "Asperger's Syndrome"
>> diagnoses are self-diagnoses. The number of proclaimed AS cases has
>> gone up by a factor of 20 since 1980.
>>
>> It's the trendy self-diagnosis, much the way "Chronic Fatigue Syndrome"
>> is.
>>
>> As in:
>>
>> "He's a genius, but he plays Worlds of Warcraft all day in his mother's
>> rec room because he's got Asperger's. So sad."
>>
>> "I can't work and am on permanent disability because of Chronic
>> Fatigue."
>>
>> Add to this the casual self-diagnoses--or diagnoses with the help of a
>> suitably-chosen doctor--of "Attention Deficit Disorder" (ADD and ADHD)
>> and "Bipoloar Disorder," and one sees that society is providing many
>> excuses for failure.
>>
>> We taxpayers are expected to work harder and longer to pay for the
>> upkeep of a rapidly-expanding number of AS, CFS, ADHD, and BD

>> layabouts.
>>
>> --Tim May
>
>Wow! Tim, you may have figured where SSI went wrong - they're now
>accepting self diagnoses of disabilities.

Indeed perhaps I should apply at once I have an phd' saying that
should beat a self diaganoses
>
>Maybe we can head this thing off by requiring an MD diagnoses!!!
oh nah then tim would have nothing to bitch about and his mind might
explode

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

65. Re: Help, phasing 2.4Ghz Double quad

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 17:42:28 UTC
From: amdx <amdx@knology.net>
Message-ID: <11533$46b36905$18d6b40c$20348@KNOLOGY.NET>
Source record: 37779
Cross-posted to: rec.radio.amateur.antenna,alt.internet.wireless,comp.sys.laptops

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:yvJsi.35$zg3.14@trnddc04...
>
> "amdx" <amdx@knology.net> wrote in message
> news:18ae7$46b32330$18d6b40c$16678@KNOLOGY.NET...
>> I'd like to build the antenna from the following page;
>>
>> http://www.frars.org.uk/cgi-bin/render.pl?action=link&url=1162&goback=1064
>>
>> But there are a few details I need to sort out before I try.
>>
>>
>>
>> 1) It uses UT141, Could I sub 9913?
>>
>> 2) Or, should I use the copper tube method shown here,
>>
>> http://martybugs.net/wireless/biquad/
>>
>> 3) The author states:
>>
>> "Next, cut four pieces of UT141 coax 80mm long, and strip 1.5mm of
>> outer from each end, leaving a total outside length of 77mm. These will
>> form part of the phasing assembly. Follow the diagram as to the
>> connection of these pieces of coax. Connection of two double quads in
>> parallel will result in an impedance of 25 ohms."
>>
>>
>>
>> Please view >4double quad back jpg< at bottom of page as reference.
>>
>>
>>
>> I assume he's describing the 77mm pieces that run at a 45* angles,
>> however the picture does not show
>>
>> UT141 coax as he describes.
>>
>>
>>
>> 4) Again the author states:
>>
>> " Next for the 25ohm to 100 ohm matching sections, cut two pieces of 61mm

>> UT141, again strip the outer back 1.5mm from each end to leave a outside
>> length of 58mm. Of course 2 100 ohm coax's in parallel will result in an
>> impedance of 50 ohms. Connect each piece to the joined 77mm lengths as
>> per the diagram. Under the connector, both centre conductors from the
>> 58mm lengths are connected to the centre pin of the SMA socket. Solder
>> the outer of these lengths to the SMA socket body to ensure a good earth
>> connection."
>>
>>
>>
>> Again he says use UT141 but I don't see it in the picture.
>>
>>
>>
>> I'm looking forward to your input!
>>
>> Thanks, Mike

> Hi Mike
> You have given some great reference sites. Thanks.

Google is a friend to all!

> If *I* was intending to feed two 25 ohm loads to a 50 ohm line, I'd
> consider a series connection rather than transforming with a balanced
> line transformer.

I don't really have a good understanding, but, looks like he has
two 50 ohm antennas connected thru two 77mm wires and then a repeat of
two 50 ohm antennas connected thru two 77mm wires. Then both sides are
connected
thru two 58mm wires to the center conductor of the connector.
(that all seems like 12.5ohms to me)
But I all ready know there is to much info missing here.

> Besides, I didnt follow how the transforming of 25 ohms on a 100 ohm line
> produced an impedance that is appropriate for matching to 50 ohms. But,
> I havent studied the electrical equivalent lengths of the coax lengths.

I know he talks about 100 ohm line but I don't see any.
I hope one of the gurus helps out on this.
Mike

66. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 18:20:55 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <fLmdnUIXqqFf7C7bnZ2dnUVZ_tSknZ2d@comcast.com>
Source record: 37780
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

Your in the wrong NG with your garbage!

<Mark@TayleorRobesin.org> wrote in message
news:g0q6b3de8egq7g8ttqqqjdlvpbs52gcoc2@4ax.com...
> On Fri, 03 Aug 2007 16:07:56 +0100, johannes
> <johs@size-nospamme84764-fitter.com> wrote:
>
>>
>>
>>The little lost angel wrote:
>>>
>>> On Thu, 02 Aug 2007 10:35:37 -0700, Tim May
>>> <timcmay@removethis.got.net> wrote:
>>>
>>> >I don't know about your friend, but most "Asperger's Syndrome"
>>> >diagnoses are self-diagnoses. The number of proclaimed AS cases has
>>> >gone up by a factor of 20 since 1980.
>>>
>>> In his case, he went through quite a lot of examinations before the
>>> diagnosis was made so I doubt it was self diagnosis. Frankly most of
>>> us are clinically insane one way or another, if not many ways, so I
>>> don't really care if my friends has AS or BS, there's no excuse for
>>> being mean or stupid as a result of being too lazy to think =P
>>
>>Since Asperger's is is described as a mild form of Autism, it leaves
>>a lot of doors open for diagnosis. In fact any circumscribed area of
>>interest: cars, computers, trains, meteorology and astrononi...etc.
>>could be a symptom of Asperger's http://www.aspergers.com/aspclin.htm
>>Any nerd characteristics is certainly very suspect. Anyone who dives
>>into one particular subject. Doing math is certainly a health hazard.
>>
>>I sometimes wonder if all this really comes from some dissatisfaction
>>by others who would like to get closer to the sufferer, but doesn't
>>quite catch their imagination. Hence it's as much other people's
>>problem as the sufferers. There should be an Asperger's contact
>>deficiency syndrome...
>
>
> is there a point here other than vent some hatred you feel man
>
> "one useless man is disgrace 2 become a law firm 3 or more become a
> congress"
> adams

>
> woger you are a Congress all in your own head
>
> http://kb9rqz.bravejournal.com/
>
> G
>
> --
> Posted via a free Usenet account from http://www.teranews.com
>

67. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 18:21:46 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <iqydnU47VZ5o7C7bnZ2dnUVZ_jidnZ2d@comcast.com>
Source record: 37781
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

take your replies back to the POLICY AND CB NG where you post as the daily spammer!

<Mark@TayleorRobesin.org> wrote in message news:d2q6b3d1lqe9ib2fhhvjtjfsddg5bg7vtt@4ax.com...
> On Fri, 03 Aug 2007 09:07:46 -0700, hot-ham-and-cheese@hotmail.com
> wrote:
>
>>On Aug 2, 2:35 pm, Tim May <timc...@removethis.got.net> wrote:
>>> In article <46b21241.114780...@news.singnet.com.sg>, The little lost
>>>
>>> angel <a?n?g?...@lovergirl.lrigrevol.moc.com> wrote:
>>> > On Sat, 28 Jul 2007 12:07:49 -0700, Radium <glucege...@excite.com>
>>> > wrote:
>>>
>>> > >On Usenet, the text-equivalent of my disability is probably noticed.
>>> > >I
>>> > >do apologize profusely, for any inconvenience it causes.
>>>
>>> > >Thank you very much in advance for your understanding, cooperation,
>>> > >and assistance.
>>>
>>> > No prob at all, one of my friend has Asperger. He's pretty smart
>>> > though and never had any problems seeing sense or nonsense for that
>>> > matter. Also one of the best person I've gotten to know from the net,
>>> > although admittedly he claims he does better online than in life. =P
>>>
>>> I don't know about your friend, but most "Asperger's Syndrome"
>>> diagnoses are self-diagnoses. The number of proclaimed AS cases has
>>> gone up by a factor of 20 since 1980.
>>>
>>> It's the trendy self-diagnosis, much the way "Chronic Fatigue Syndrome"
>>> is.
>>>
>>> As in:
>>>
>>> "He's a genius, but he plays Worlds of Warcraft all day in his mother's
>>> rec room because he's got Asperger's. So sad."
>>>
>>> "I can't work and am on permanent disability because of Chronic
>>> Fatigue."
>>>
>>> Add to this the casual self-diagnoses--or diagnoses with the help of a

>>> suitably-chosen doctor--of "Attention Deficit Disorder" (ADD and ADHD)
>>> and "Bipoloar Disorder," and one sees that society is providing many
>>> excuses for failure.
>>>
>>> We taxpayers are expected to work harder and longer to pay for the
>>> upkeep of a rapidly-expanding number of AS, CFS, ADHD, and BD
>>> layabouts.
>>>
>>> --Tim May
>>
>>Wow! Tim, you may have figured where SSI went wrong - they're now
>>accepting self diagnoses of disabilities.
>
> Indeed perhaps I should apply at once I have an phd' saying that
> should beat a self diaganoses
>>
>>Maybe we can head this thing off by requiring an MD diagnoses!!!
> oh nah then tim would have nothing to bitch about and his mind might
> explode
>
> "one useless man is disgrace 2 become a law firm 3 or more become a
> congress"
> adams
>
> woger you are a Congress all in your own head
>
> http://kb9rqz.bravejournal.com/
>
> G
>
> --
> Posted via a free Usenet account from http://www.teranews.com
>

68. Re: Wants to poke out strong signal

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 18:30:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7nr6b3550fk50frtv64eof1bmqrpoqe6v4@4ax.com>
Source record: 37632

On Fri, 03 Aug 2007 07:20:18 -0400, Christopher Cox
<chrisTOPHERcOX@coboxincORORATED.com> wrote:

>Richard Clark wrote:
>> On Wed, 01 Aug 2007 11:06:38 -0400, Michael Coslo <mjc5@psu.edu>
>> wrote:
>>
>>
>>>>>However, returning to the original link, and the design behind it, it
>>>>>is called beam forming as practiced through controlled delays.
>>>
>>> I'm curious about the technology to sense the incoming angle.
>>
>>
>> Hi Mike,
>>
>> I've spent all day aboard the USS Bunker Hill and had a tour of their
>> phased array RADAR systems. They use roughly 4000 separate elements
>> with computer controlled delays to steer the beam anywhere they want
>> (within a quadrant as there are four panels). The 'tronics consume 3
>> decks of rack equipment.
>
>Just WOW! What a fun toy.

Hi Chris,

It sure was. I took 324 photos of the ship and the shore we cruised
by (much of it was Seattle waterfront as we passed in review). I also
focused on the external antennas.

The Bunker Hill bristles with a lot of them, including two HF
Fantails. I asked about their HF operations and the Comm Officer said
it was for ship-to-ship - if and when they did it. Lot's of other
RADARS, from the big to the small, especially the MK 15 Phalanx
Close-In Weapons System
(http://www.fas.org/man/dod-101/sys/ship/weaps/mk-15.htm)

While I was manning the rails with the CTs, the Chief pointed out a
system next to me on the deck. It was a RADAR signature sniffer that
they used to catalog the emissions (from dare I say the "enemy?").
They spent some time off the Asian coast "lurking" during missile
shots. Their gear also had the capacity to send corrupted waveforms
to confound RADARs.

73's
Richard Clark, KB7QHC

69. Re: Help, phasing 2.4Ghz Double quad

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 18:35:38 UTC
From: dplatt@radagast.org
Message-ID: <q49co4-4kn.ln1@radagast.org>
Source record: 37637
Cross-posted to: rec.radio.amateur.antenna,alt.internet.wireless,comp.sys.laptops

In article <11533$46b36905$18d6b40c$20348@KNOLOGY.NET>,
amdx <amdx@knology.net> wrote:

>I don't really have a good understanding, but, looks like he has
>two 50 ohm antennas connected thru two 77mm wires and then a repeat of
>two 50 ohm antennas connected thru two 77mm wires. Then both sides are
>connected
>thru two 58mm wires to the center conductor of the connector.
> (that all seems like 12.5ohms to me)
>But I all ready know there is to much info missing here.

>> Besides, I didnt follow how the transforming of 25 ohms on a 100 ohm line
>> produced an impedance that is appropriate for matching to 50 ohms. But,
>> I havent studied the electrical equivalent lengths of the coax lengths.
>
> I know he talks about 100 ohm line but I don't see any.
>I hope one of the gurus helps out on this.

Let's start out by assuming that the biquads are each 50 ohms (which
is something you can ensure by placing them at the correct distance
from the reflecting ground-plane).

Each 50-ohm biquad is fed through a suitable length of 50-ohm
semi-rigid coaxial line. Since the antenna's impedance matches that of
the coax, there will be a 1:1 SWR on the coax, and the same 50-ohm
impedance will appear at the far end of the coax. In this particular
case, the semi-rigid coax will consist of the part which goes through
the reflector (supporting the biquad) plus the trimmed 80mm section
(which ends up being 77mm after stripping and soldering).

There are four such 77mm lengths, which come together as two pairs.
At this point, each pair is soldered together, placing two 50-ohm
loads in parallel. This creates a 25-ohm load.

Now, each 25-ohm connection is soldered to a further length of 50-ohm
cable, 58mm long plus a bit for making the connection. The two 58mm
sections come together, at the SMA connector.

These 58mm sections act as impedance transformers. One of the useful
characteristics of a coax which is 1/4 or 3/4 or 5/4 electrical
wavelength long, is that it transforms a resistive impedance at one
end, to a different resistive impedance at the other... and the
geometric mean of these two impedances is equal to the characteristic
impedance of the feedline.

In this case, if you have a 25-ohm impedance at one end, and the cable has a 50-ohm impedance, then the impedance at the other end of the cable will be 100 ohms.

This places two 100-ohm impedances in parallel where they're connected to the SMA jack, resulting in a 50-ohm impedance.

In the case of this particular design, the impedance-matching sections (58mm) aren't actually the 3/4 electrical wavelength that one might expect. UT141 has a velocity factor of 0.7, and my slide-rule calculation suggests that they'd be around 65mm long for a true 3/4 electrical wavelength at 2.4 GHz.

I would guess that the biquad antennas aren't exactly 50 ohms resistive, and that this impedance is being transformed somewhat by the 77mm sections, and that the length of the final impedance-matching section has been hand-tweaked to 58mm to give the best practical match to 50 ohms (and thus SWR) for the antenna and phasing system.

That being the case, I'd probably recommend trying to reproduce the antenna design as-published. If you switch to a cable having a different velocity factor, you may need to do some cutting-and-trying to get the right impedance match.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

70. Re: Help, phasing 2.4Ghz Double quad

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 18:37:00 UTC
From: amdx <amdx@knology.net>
Message-ID: <22b95$46b375d8$18d6b40c$7521@KNOLOGY.NET>
Source record: 37633
Cross-posted to: rec.radio.amateur.antenna,alt.internet.wireless,comp.sys.laptops

```
"amdx" <amdx@knology.net> wrote in message
news:11533$46b36905$18d6b40c$20348@KNOLOGY.NET...
>
> "Jerry Martes" <j.jmartes@verizon.net> wrote in message
> news:yvJsi.35$zg3.14@trnddc04...
>>
>> "amdx" <amdx@knology.net> wrote in message
>> news:18ae7$46b32330$18d6b40c$16678@KNOLOGY.NET...
>>> I'd like to build the antenna from the following page;
>>>
>>> http://www.frars.org.uk/cgi-bin/render.pl?action=link&url=1162&goback=1064
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>>> But there are a few details I need to sort out before I try.
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>>>
>>> 1) It uses UT141, Could I sub 9913?
>>>
>>> 2) Or, should I use the copper tube method shown here,
>>>
>>> http://martybugs.net/wireless/biquad/
>>>
>>> 3) The author states:
>>>
>>> "Next, cut four pieces of UT141 coax 80mm long, and strip 1.5mm of
>>> outer from each end, leaving a total outside length of 77mm. These will
>>> form part of the phasing assembly. Follow the diagram as to the
>>> connection of these pieces of coax. Connection of two double quads in
>>> parallel will result in an impedance of 25 ohms."
>>>
>>>
>>>
>>> Please view >4double quad back jpg< at bottom of page as reference.
>>>
>>>
>>>
>>> I assume he's describing the 77mm pieces that run at a 45* angles,
>>> however the picture does not show
>>>
>>> UT141 coax as he describes.
>>>
>>>
>>>
```

>>> 4) Again the author states:
>>>
>>> " Next for the 25ohm to 100 ohm matching sections, cut two pieces of
>>> 61mm UT141, again strip the outer back 1.5mm from each end to leave a
>>> outside length of 58mm. Of course 2 100 ohm coax's in parallel will
>>> result in an impedance of 50 ohms. Connect each piece to the joined 77mm
>>> lengths as per the diagram. Under the connector, both centre conductors
>>> from the 58mm lengths are connected to the centre pin of the SMA socket.
>>> Solder the outer of these lengths to the SMA socket body to ensure a
>>> good earth connection."
>>>
>>>
>>>
>>> Again he says use UT141 but I don't see it in the picture.
>>>
>>>
>>>
>>> I'm looking forward to your input!
>>>
>>> Thanks, Mike
>
>> Hi Mike
>> You have given some great reference sites. Thanks.
>
> Google is a friend to all!
>
>> If *I* was intending to feed two 25 ohm loads to a 50 ohm line, I'd
>> consider a series connection rather than transforming with a balanced
>> line transformer.
>
> I don't really have a good understanding, but, looks like he has
> two 50 ohm antennas connected thru two 77mm wires and then a repeat of
> two 50 ohm antennas connected thru two 77mm wires. Then both sides are
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> thru two 58mm wires to the center conductor of the connector.
> (that all seems like 12.5ohms to me)
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>> Besides, I didnt follow how the transforming of 25 ohms on a 100 ohm
>> line produced an impedance that is appropriate for matching to 50 ohms.
>> But, I havent studied the electrical equivalent lengths of the coax
>> lengths.
>
> I know he talks about 100 ohm line but I don't see any.
> I hope one of the gurus helps out on this.
> Mike

I got some help offline (thanks Dave) the wires I thought were solid are
actually

a coax (UT141). It make a little more sense now.
Mike

71. Re: Homebrew wifi antenna coax adapters

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 18:59:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13b6unqh4co9v2f@corp.supernews.com>
Source record: 37634

Michael Coslo wrote:
>
> You might want to read this one:
>
> http://www.mikeholt.com/documents/mojofiles/DuPontTeflonFEP2003MSDS.pdf
>
>
> I'll take the watermelon over teflon fumes any day.

Although not unheard of, FEP is less commonly found in cables than PTFE.
Do you have a link for the PTFE hazard sheet?

Both are Teflon, which is a DuPont trade name for a variety of related
materials.

Roy Lewallen, W7EL

72. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 19:00:26 UTC
From: Mark@TayleorRobesin.org
Message-ID: <spu6b35pntm2e7f1p6268jm8eekq3fmta9@4ax.com>
Source record: 37635
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

On Fri, 3 Aug 2007 14:20:55 -0400, "John Doe" <hgorden@adelphia.net>
wrote:

>Your in the wrong NG with your garbage!

just the one it started in
>
><Mark@TayleorRobesin.org> wrote in message
>news:g0q6b3de8egq7g8ttqqqjdlvpbs52gcoc2@4ax.com...
>> On Fri, 03 Aug 2007 16:07:56 +0100, johannes
>> <johs@size-nospamme84764-fitter.com> wrote:
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>>>
>>>The little lost angel wrote:
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>>>> On Thu, 02 Aug 2007 10:35:37 -0700, Tim May
>>>> <timcmay@removethis.got.net> wrote:
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>>>> >I don't know about your friend, but most "Asperger's Syndrome"
>>>> >diagnoses are self-diagnoses. The number of proclaimed AS cases has
>>>> >gone up by a factor of 20 since 1980.
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>>>> In his case, he went through quite a lot of examinations before the
>>>> diagnosis was made so I doubt it was self diagnosis. Frankly most of
>>>> us are clinically insane one way or another, if not many ways, so I
>>>> don't really care if my friends has AS or BS, there's no excuse for
>>>> being mean or stupid as a result of being too lazy to think =P
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>>>Since Asperger's is is described as a mild form of Autism, it leaves
>>>a lot of doors open for diagnosis. In fact any circumscribed area of
>>>interest: cars, computers, trains, meteorology and astrononi...etc.
>>>could be a symptom of Asperger's http://www.aspergers.com/aspclin.htm
>>>Any nerd characteristics is certainly very suspect. Anyone who dives
>>>into one particular subject. Doing math is certainly a health hazard.
>>>
>>>I sometimes wonder if all this really comes from some dissatisfaction
>>>by others who would like to get closer to the sufferer, but doesn't
>>>quite catch their imagination. Hence it's as much other people's
>>>problem as the sufferers. There should be an Asperger's contact
>>>deficiency syndrome...
>>
>>
>> is there a point here other than vent some hatred you feel man

>>
>> "one useless man is disgrace 2 become a law firm 3 or more become a
>> congress"
>> adams
>>
>> woger you are a Congress all in your own head
>>
>> http://kb9rqz.bravejournal.com/
>>
>> G
>>
>> --
>> Posted via a free Usenet account from http://www.teranews.com
>>
>

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

73. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 19:01:11 UTC
From: Mark@TayleorRobesin.org
Message-ID: <tqu6b3h9obeuprkmib1hhb9bpij9mc94ua@4ax.com>
Source record: 37636
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

On Fri, 3 Aug 2007 14:21:46 -0400, "John Doe" <hgorden@adelphia.net>
wrote:

>take your replies back to the POLICY AND CB NG where you post as the daily
>spammer!

why would I reply a RRS in RRAP?
>
><Mark@TayleorRobesin.org> wrote in message
>news:d2q6b3d1lqe9ib2fhhvjtjfsddg5bg7vtt@4ax.com...
>> On Fri, 03 Aug 2007 09:07:46 -0700, hot-ham-and-cheese@hotmail.com
>> wrote:
>>
>>>On Aug 2, 2:35 pm, Tim May <timc...@removethis.got.net> wrote:
>>>> In article <46b21241.114780...@news.singnet.com.sg>, The little lost
>>>>
>>>> angel <a?n?g?...@lovergirl.lrigrevol.moc.com> wrote:
>>>> > On Sat, 28 Jul 2007 12:07:49 -0700, Radium <glucege...@excite.com>
>>>> > wrote:
>>>>
>>>> > >On Usenet, the text-equivalent of my disability is probably noticed.
>>>> > >I
>>>> > >do apologize profusely, for any inconvenience it causes.
>>>>
>>>> > >Thank you very much in advance for your understanding, cooperation,
>>>> > >and assistance.
>>>>
>>>> > No prob at all, one of my friend has Asperger. He's pretty smart
>>>> > though and never had any problems seeing sense or nonsense for that
>>>> > matter. Also one of the best person I've gotten to know from the net,
>>>> > although admittedly he claims he does better online than in life. =P
>>>>
>>>> I don't know about your friend, but most "Asperger's Syndrome"
>>>> diagnoses are self-diagnoses. The number of proclaimed AS cases has
>>>> gone up by a factor of 20 since 1980.
>>>>
>>>> It's the trendy self-diagnosis, much the way "Chronic Fatigue Syndrome"
>>>> is.
>>>>
>>>> As in:
>>>>
>>>> "He's a genius, but he plays Worlds of Warcraft all day in his mother's
>>>> rec room because he's got Asperger's. So sad."
>>>>

>>>> "I can't work and am on permanent disability because of Chronic
>>>> Fatigue."
>>>>
>>>> Add to this the casual self-diagnoses--or diagnoses with the help of a
>>>> suitably-chosen doctor--of "Attention Deficit Disorder" (ADD and ADHD)
>>>> and "Bipoloar Disorder," and one sees that society is providing many
>>>> excuses for failure.
>>>>
>>>> We taxpayers are expected to work harder and longer to pay for the
>>>> upkeep of a rapidly-expanding number of AS, CFS, ADHD, and BD
>>>> layabouts.
>>>>
>>>> --Tim May
>>>
>>>Wow! Tim, you may have figured where SSI went wrong - they're now
>>>accepting self diagnoses of disabilities.
>>
>> Indeed perhaps I should apply at once I have an phd' saying that
>> should beat a self diaganoses
>>>
>>>Maybe we can head this thing off by requiring an MD diagnoses!!!
>> oh nah then tim would have nothing to bitch about and his mind might
>> explode
>>
>> "one useless man is disgrace 2 become a law firm 3 or more become a
>> congress"
>> adams
>>
>> woger you are a Congress all in your own head
>>
>> http://kb9rqz.bravejournal.com/
>>
>> G
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>> --
>> Posted via a free Usenet account from http://www.teranews.com
>>
>

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

74. Re: Help, phasing 2.4Ghz Double quad

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 19:59:36 UTC
From: amdx <amdx@knology.net>
Message-ID: <9d3ad$46b38929$18d6b40c$31468@KNOLOGY.NET>
Source record: 37638
Cross-posted to: rec.radio.amateur.antenna,alt.internet.wireless,comp.sys.laptops

Thank you for that clear explanation.
And regarding the distance from ground-plane, I've seen two different specs one 30.5mm and the other 18mm.
Thanks again, Mike

> Let's start out by assuming that the biquads are each 50 ohms (which
> is something you can ensure by placing them at the correct distance
> from the reflecting ground-plane).
>
> Each 50-ohm biquad is fed through a suitable length of 50-ohm
> semi-rigid coaxial line. Since the antenna's impedance matches that of
> the coax, there will be a 1:1 SWR on the coax, and the same 50-ohm
> impedance will appear at the far end of the coax. In this particular
> case, the semi-rigid coax will consist of the part which goes through
> the reflector (supporting the biquad) plus the trimmed 80mm section
> (which ends up being 77mm after stripping and soldering).
>
> There are four such 77mm lengths, which come together as two pairs.
> At this point, each pair is soldered together, placing two 50-ohm
> loads in parallel. This creates a 25-ohm load.
>
> Now, each 25-ohm connection is soldered to a further length of 50-ohm
> cable, 58mm long plus a bit for making the connection. The two 58mm
> sections come together, at the SMA connector.
>
> These 58mm sections act as impedance transformers. One of the useful
> characteristics of a coax which is 1/4 or 3/4 or 5/4 electrical
> wavelength long, is that it transforms a resistive impedance at one
> end, to a different resistive impedance at the other... and the
> geometric mean of these two impedances is equal to the characteristic
> impedance of the feedline.
>
> In this case, if you have a 25-ohm impedance at one end, and the cable
> has a 50-ohm impedance, then the impedance at the other end of the
> cable will be 100 ohms.
>
> This places two 100-ohm impedances in parallel where they're connected
> to the SMA jack, resulting in a 50-ohm impedance.
>
> In the case of this particular design, the impedance-matching sections
> (58mm) aren't actually the 3/4 electrical wavelength that one might
> expect. UT141 has a velocity factor of 0.7, and my slide-rule
> calculation suggests that they'd be around 65mm long for a true 3/4

> electrical wavelength at 2.4 GHz.
>
> I would guess that the biquad antennas aren't exactly 50 ohms
> resistive, and that this impedance is being transformed somewhat by
> the 77mm sections, and that the length of the final impedance-matching
> section has been hand-tweaked to 58mm to give the best practical match
> to 50 ohms (and thus SWR) for the antenna and phasing system.
>
> That being the case, I'd probably recommend trying to reproduce the
> antenna design as-published. If you switch to a cable having a
> different velocity factor, you may need to do some cutting-and-trying
> to get the right impedance match.
>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

75. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 20:19:19 UTC
From: Rozagy <Rozagy@aol.com>
Message-ID: <1186172359.517856.127610@o61g2000hsh.googlegroups.com>
Source record: 37639
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

On Aug 2, 6:35?pm, Tim May <timc...@removethis.got.net> wrote:
> In article <46b21241.114780...@news.singnet.com.sg>, The little lost
>
> angel <a?n?g?...@lovergirl.lrigrevol.moc.com> wrote:
> > On Sat, 28 Jul 2007 12:07:49 -0700, Radium <glucege...@excite.com>
> > wrote:
>
> > >On Usenet, the text-equivalent of my disability is probably noticed. I
> > >do apologize profusely, for any inconvenience it causes.
>
> > >Thank you very much in advance for your understanding, cooperation,
> > >and assistance.
>
> > No prob at all, one of my friend hasAsperger. He's pretty smart
> > though and never had any problems seeing sense or nonsense for that
> > matter. Also one of the best person I've gotten to know from the net,
> > although admittedly he claims he does better online than in life. =P
>
> I don't know about your friend, but most "Asperger'sSyndrome"
> diagnoses are self-diagnoses. The number of proclaimed AS cases has
> gone up by a factor of 20 since 1980.
>
> It's the trendy self-diagnosis, much the way "Chronic FatigueSyndrome"
> is.
>
> As in:
>
> "He's a genius, but he plays Worlds of Warcraft all day in his mother's
> rec room because he's gotAsperger's. So sad."
>
> "I can't work and am on permanent disability because of Chronic
> Fatigue."
>
> Add to this the casual self-diagnoses--or diagnoses with the help of a
> suitably-chosen doctor--of "Attention Deficit Disorder" (ADD and ADHD)
> and "Bipoloar Disorder," and one sees that society is providing many
> excuses for failure.
>
> We taxpayers are expected to work harder and longer to pay for the
> upkeep of a rapidly-expanding number of AS, CFS, ADHD, and BD
> layabouts.
>
> --Tim May

Tim May - you are an idiot!!!!!!!

Where exactly do you get the "most AS diagnosis are self-diagniosis"
from?

Your head?

LOL :-))

That's not the way to do serious research.

All the people I know with AS have an official dx by recognised
clinical psychologists specialising in Autism and Asperger's.
Including myself.

why don't you just say you're jealous and be done with it?

:-))

76. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 20:20:29 UTC
From: Rozagy <Rozagy@aol.com>
Message-ID: <1186172429.342978.295590@d55g2000hsg.googlegroups.com>
Source record: 37640
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

```
On Aug 3, 5:04?am, a?n?g?...@lovergirl.lrigrevol.moc.com (The little
lost angel) wrote:
> On Thu, 02 Aug 2007 10:35:37 -0700, Tim May
>
> <timc...@removethis.got.net> wrote:
> >I don't know about your friend, but most "Asperger'sSyndrome"
> >diagnoses are self-diagnoses. The number of proclaimed AS cases has
> >gone up by a factor of 20 since 1980.
>
> In his case, he went through quite a lot of examinations before the
> diagnosis was made so I doubt it was self diagnosis. Frankly most of
> us are clinically insane one way or another, if not many ways, so I
> don't really care if my friends has AS or BS, there's no excuse for
> being mean or stupid as a result of being too lazy to think =P
>
> --
> A Lost Angel, fallen from heaven
> Lost in dreams, Lost in aspirations,
> Lost to the world, Lost to myself

I aggree with you!!
```

77. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 20:21:29 UTC
From: Rozagy <Rozagy@aol.com>
Message-ID: <1186172489.250063.181380@g4g2000hsf.googlegroups.com>
Source record: 37641
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

On Aug 3, 4:07?pm, johannes <j...@size-nospamme84764-fitter.com>
wrote:
> The little lost angel wrote:
>
>
>
> > On Thu, 02 Aug 2007 10:35:37 -0700, Tim May
> > <timc...@removethis.got.net> wrote:
>
> > >I don't know about your friend, but most "Asperger'sSyndrome"
> > >diagnoses are self-diagnoses. The number of proclaimed AS cases has
> > >gone up by a factor of 20 since 1980.
>
> > In his case, he went through quite a lot of examinations before the
> > diagnosis was made so I doubt it was self diagnosis. Frankly most of
> > us are clinically insane one way or another, if not many ways, so I
> > don't really care if my friends has AS or BS, there's no excuse for
> > being mean or stupid as a result of being too lazy to think =P
>
> SinceAsperger'sis is described as a mild form of Autism, it leaves
> a lot of doors open for diagnosis. In fact any circumscribed area of
> interest: cars, computers, trains, meteorology and astrononi...etc.
> could be a symptom ofAsperger'shttp://www.aspergers.com/aspclin.htm
> Any nerd characteristics is certainly very suspect. Anyone who dives
> into one particular subject. Doing math is certainly a health hazard.
>
> I sometimes wonder if all this really comes from some dissatisfaction
> by others who would like to get closer to the sufferer, but doesn't
> quite catch their imagination. Hence it's as much other people's
> problem as the sufferers. There should be anAsperger'scontact
> deficiencysyndrome...

The best way for you to keep people from knowing for a fact that
you're stupid is if you didn't say another word for the rest of your
life!

78. Re: Help, phasing 2.4Ghz Double quad

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 20:26:24 UTC
From: dplatt@radagast.org
Message-ID: <gkfco4-9u4.ln1@radagast.org>
Source record: 37642
Cross-posted to: rec.radio.amateur.antenna,alt.internet.wireless,comp.sys.laptops

In article <9d3ad$46b38929$18d6b40c$31468@KNOLOGY.NET>,
amdx <amdx@knology.net> wrote:

> Thank you for that clear explanation.

Quite welcome!

>And regarding the distance from ground-plane, I've seen two different
>specs one 30.5mm and the other 18mm.

I believe that those two distances are optimizing for different things.

If I recall correctly, the 30.5 mm spacing is optimizing the antenna
for gain (the sharpest forward-looking lobe, likely).

The narrower spacing seems to optimize the design for the best
impedance match (the biquad is very close to 50 ohms in this version).

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

79. Re: King of America speaks out publicly [Press Release] - Live broadcasts out in the fields, trumping evil demons by the power of the Word - We, as the People, demand you allow US, the human species to openly discuss the public evidence on who funded the terrorist acts of 911 according to the FBI

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 21:08:51 UTC
From: Get_bush_4_Jesus@hotmail.com
Message-ID: <1186175331.030071.85760@i38g2000prf.googlegroups.com>
Source record: 37643
Cross-posted to: alt.conspiracy,rec.radio.shortwave,alt.radio.broadcasting,rec.radio.amateur.antenna,talk.politics.libertarian

/ /Iowa GOP is STILL planning to use the easily rigged
Diebold computers to "count" the vote at the Straw poll! \ \

THIS IS TREASON. But, look, teen soldiers are commanded to be
bushite nazi savages, who cowardly refuse to defend America
from Mr. al-Qaida, General Ahmad, all to thieve further from
the undefended American public.

The Arts - an Inside Job

Look, CNN, CBC, and FOXNEWS is lying to US. They know
the EVIL bushmob did 911, and have decided to kill
your kids for more rewards, instead of defending the
innocent. They hold the true value of YOUR LIFE in
contempt. Demand justice to defend our freedoms why
don't You?

http://media.indypgh.org/uploads/2007/07/the_arts_-_an_inside_job.mp3
http://boston.indymedia.org/usermedia/audio/5/The_Arts_-_an_inside_job.mp3
http://rochester.indymedia.org/usermedia/audio/4/the_arts_-_an_inside_job.mp3
http://www.ntimc.org/attachments/jul2007/the_arts__an_inside_job.mp3
http://istanbul.indymedia.org/uploads/2007/07/the_arts_-_an_inside_job.mp3
http://imctj.espora.org/uploads/2007/07/the_arts_-_an_inside_job.mp3
http://www.stlimc.org/usermedia/audio/4/the_arts_-_an_inside_job.mp3
http://newmexico.indymedia.org/uploads/2007/07/the_arts_-_an_inside_job.mp3
https://israel.indymedia.org/usermedia/audio/4/the_arts_-_an_inside_job.mp3
http://houston.indymedia.org/uploads/2007/07/the_arts_-_an_inside_job.mp3
http://cleveland.indymedia.org/uploads/2007/07/the_arts_-_an_inside_job.mp3
ttp://pr.indymedia.org/uploads/2007/07/the_arts_-_an_inside_job.mp3
http://neworleans.media.indypgh.org/uploads/2007/07/the_arts_-_an_inside_job.mp3
http://dc.indymedia.org/usermedia/audio/4/the_arts_-_an_inside_job.mp3

[AMERICAN PAID FOR] Israelis Kill 34 [godly innocent],
Injure 86 [godly innocent], Grab 220 [godly innocent]
- [nazi corporate TV amerka]World Snores
http://www.imemc.org/article/49685

-

MY DEMANDS

/ / eight million Iraqis require immediate emergency aid \ \

I, as the Son of Man, DEMAND, America order millions of
gallons of clean drinking water to be shipped immediately to
Iraq to save the lives of US, the Human species. Please, help
US make this a reality. Today. Please.

http://houston.indymedia.org/uploads/2007/07/justice_for_christ_in_america.mp3
http://neworleans.media.indypgh.org/uploads/2007/07/justice_for_christ_in_america.mp3
http://www.stlimc.org/usermedia/audio/8/justice_for_christ_in_america.mp3
http://chicago.indymedia.org/usermedia/audio/8/justice_for_christ_in_america.mp3
https://israel.indymedia.org/usermedia/audio/8/justice_for_christ_in_america.mp3
http://austin.indymedia.org/usermedia/audio/8/justice_for_christ_in_america.mp3
http://arizona.indymedia.org/uploads/justice_for_christ_in_america.mp3
http://istanbul.indymedia.org/uploads/2007/07/justice_for_christ_in_america.mp3
http://boston.indymedia.org/usermedia/audio/3/Justice_for_Christ_in_America.mp3
http://cleveland.indymedia.org/uploads/2007/07/justice_for_christ_in_america.mp3
http://www.indymedia.no/usermedia/audio/8/justice_for_christ_in_america.mp3
http://media.indypgh.org/uploads/2007/07/justice_for_christ_in_america.mp3
http://newmexico.indymedia.org/uploads/2007/07/justice_for_christ_in_america.mp3

-

THEY GANG RAPED A FOURTEEN YEAR OLD WHILE CARRYING LOADED
WEAPONRY

AFTER RAPING THE CHILD IN FRONT OF HER FAMILY - THEY SLOWLY
MURDERED EVERY SINGLE ONE AS INNOCENT GOD LOVING HUMANS

- but -

BUSHITE AMERKA CLAIMS THIS DOESN'T WARRANT THE DEATH SENTENCE?

Again, evil bushite THIEVES claim they are justified when
indiscriminately bombing populated cities to MURDER US People.

General Johnny would teach MY soldiers to immediately arrest
to kill for such criminality. In fact, I'd likely even throw
in some bonus cash, an a Freedom medal from all lovers of
Liberty. Did you know, many bushite sing a song about killing
innocent young girls for pleasure? Did you know that also, an
"American" radio host likes playing that same song as recorded
on "American" airwaves? Fight back for God, or die from self
contempt my friends, fight back for life and love.

Again, evil bushite THIEVES claim they are justified when
indiscriminately bombing populated cities to MURDER US People.
All to help 'escape' the neocon ENEMIES of America - they also
support "officially" destroying Our public infrastructure,
thieving humanitarian aid, while incarcerating innocent people
to collectively be punished by the TRULY Satanic enemies of
GOD. Ten "CIA" bushite enemies have been found to have
kidnapped near one thousand innocent Americans to be tortured
to death, in tyrannical nations friendly under American funding
by Bush unquestioningly. Fight back for your neighbor, fight
back for America, fight back for YOURSELF. Or, don't.

See the bushite, you bill it for Christ, You bill it for America, You bill it for them, you bill it for US.

Murdering bushite gang rapists try escaping true accountability

http://womensspace.wordpress.com/2006/07/09/rape-of-the-hadji-girl-part-3-five-more-us-soldiers-charged-abir-hamzah-was-14-years-old/

/ / Why did the Army, within three hours, return to tell neighbors that this was the work of "insurgents" apparently without any investigation? \ \

See? in Johnny's world, that "the Army" person would have been the FIRST questioned, then likely arrested. But look, it hasn't even been acknowledged as evil doing in progress. (Every time you read, "The Army says..", become aware.)

It should be noted, ungodly bushite enemy commanders call every car bomb in Iraq, al-Qaida, without even pretending to do freedom operations for YOUR protections, as just another dead body in the rubble. (Likely caused by Aegis for cash profit.) So then, look my friends, Amerka refuses to demand justice to save the lives of their very own sons and daughters. And when, WE, Humanity, beg them to answer our calls for accountability, they refuse but for to LIE, stating publicly, "God" would grant robbing from innocent others, to enrich their great unholy tyrannical demon liar. They know easily that the bushmob did 911, and they like it. No, they crave it. The chance of murdering their own "loves" to enslave the human race for the antichrist, sounds great, just as long as they can get themselves in on the take.

/ / Idiot General Says Dead U.S. Troops Best Reason To Keep War Going And Kill More U.S. Troops

[Option B: More Dead U.S. Generals And Fewer Dead U.S. Troops ?] \ \

If the sacrifice of soldiers lives is going to mean anything, it going to mean how long it took, Americans to care for themselves as really worth something. When, or if that day should come, it will be the day where Iraqis victims are seen, as just you or me. Today, there is nothing more i wish, than to hear bushite nazi savage thieves for the neocon die rightly, before the innocent they target for murder. All in an attempt to 'escape' those truly responsible for the crimes of 911 a bushite whore practices, as an enemy to Christ and America.

Just look at that my friends of Earth just look at that. Americans speak only contempt for the value of human life. Every day, INNOCENT Iraqis die by the criminal actions of the demonic neocon enemy forces of EVIL, and our deaths as the god loving mean nothing. A small few die in a bridge ACCIDENT,

and every corporate channel devotes the entire day's news as it. Allawi confesses to killing children for "CIA" money, and there, as with the soldiers who braggingly, beat innocent children to death for sexual pleasure, bomb people indiscriminately, or steal all the humanitarian aid, don't command your slightest concern as impartial paying for it TV viewers. They say, US people who aren't "Americans", do not deserve due process, the freedoms they claim to own exclusively, of which WE, are granted nothing of. See?, by not using evidence to from your guilty verdicts, how can it be therefore possible, to know, you've arrested, tried, then executed a mass murdering NEOCON war criminal? I don't think Americans could possibly be more disrespectful to God and country, Johnny and Justice right now, do You?

http://existentialistcowboy.blogspot.com/2007/06/911-culprits-why-towers-really-fell.html

/ / We know that a crime was committed on 911. George W. Bush, of course, quashed all investigations before they could begin. Since when are crimes not investigated? [...] It is not too late, however, to begin such an investigation. There is no statute of limitations on mass murder. \ \

We, as Humanity, have to rise against the neocon LIAR enemies who forsake the value of Human life. Death to the bushite, death to the enemies of America's America.

/ / Army Secretary Pete Geren asked a military review panel to decide whether Lt. Gen. Philip Kensinger, who led Army special forces operations in Afghanistan after the Sept. 11 attacks, should also have his rank reduced. \ \

A bushite demon CAUGHT aiding and abetting the crime of FIRST DEGREE MURDER of a trying to be Patriot Soldier, is made to fear in bushite amerka, he might face a reduction in rank! MURDER~!

/ / Congressman Dennis Kucinich, a member of the House oversight and government reform committee, which has been investigating war contractors. "There's no democratic control and there's no intention to have democratic control here." \ \

Right. The demonic lawless actions of Aegis posing as al-Qaida killing police officers undermine freedom for Iraqis and Americans, alone with ALL the rest of US. All criminally gotten assets of lawless mercenaries will be hunted by every police service; those that complain as traitors to Freedom as Justice, WE, the real Patriot warriors, committed to defensive measures, will be rewarded to bill for. IF! Johnny is recognized a Mythical King with money to spend better than a neocon saboteur. Your call... Reminder: The neocons in YOUR power, were never elected, nor, was Bush the demon enemy of

all Human Life. A demon that says if you disagree with his blind blanket statements against innocent Life, YOUR a terrorist. At least with GOD, we'd be only killing criminals we couldn't otherwise defend ourselves from with evidenced conclusion through practiced Law judged fairly.

http://www.guardian.co.uk/Iraq/Story/0,,2138917,00.html

/ / TheSpyWhoBilledMe.com regularly breaks news on the clandestine world of private contractors and US intelligence, recently established that Washington spends $42bn (£21bn) annually on private intelligence contractors \ \

do the math - do the math - do the math - do the math

42 billion. 42 thousand million. Or, hiring maybe twenty or thirty bushite LIAR enemies, who blindly giving Americans pay not only billion dollar saleries, but also with their forsaken lives as unworthy of real protections. CNN, CBC, and FOXNEWS knows the bushmob did 911. [Nazi zionists suck!]

So, million dollar saleries? I doubt. Likely a neocon enemy or two robbing from an undefended America. Remember, Peter Power wants US to believe ALL of Scotland Yard would murder Brits for stolen bucks. Frankly chaps, I just refuse to believe such bullocks.

Be me man,

King Johnny Wizard

-

The Ground Truth
http://www.informationclearinghouse.info/article15319.htm

The part where pro-bush "American" soldiers drive over children to kill them for fun, all because they say our Humanity let's those responsible escape retribution for being Satanically evil as enemies to Christ, left me angered beyond words. While CNN, CBC, and FOXNEWS couldn't care less for those children, but will tell us, these 9 accident victims must rule, so far, two full days of wall to wall coverage. "Pro-Western" Allawi blowing up school buses for "CIA" money? Who cares? Really who cares in TV America for defending OUR children's lives I'm saying? Get me in the news my brothers and sisters, and I'll make the best of it. Just do it. Fear not for my life loves, fear for your life left to silently die in contempt for Humans being.

Thanx much.

-

"He never would have called me 'sniveling,"
http://www.democraticunderground.com/discuss/duboard.php?az=view_all&address=389x1466466

/ / "He never would have called me 'sniveling,"' O'Neal said.
"I don't remember ever speaking to this chaplain, and I
find this characterization of Pat really upsetting. He
never once degraded me. He's the only person I ever
worked for who didn't degrade anyone. He wasn't that
sort of person."

The chaplain's name is blacked out in the documents. \ \

-

Jeeze, nobody tell Chris what CNN is reporting

MSNBC'S CHRIS MATTHEWS :

" So, the longer we stay there.. do the number of people
in al-Qaida grow or become lesser? Aren't there more
al-Qaida every year?... Because if we stay there four
more years.."

Jeeze, nobody tell Chris what CNN is reporting, where
the murder of innocent people outside of Baghdad makes
the neocon soldiers appear as Heroes, all because they
can blindly blame the CRIME on al-Qaida without even
the slightest inquiry. Catch this Revelation, among
many others, in one of many miraculous Mr. America,
Johnny Wizard Podcasts. Get your copy before they're
all gone!!1 Haahahaheh.. boy I'm I ever one hell of
a great guy.. know..

Love yeah!,

President and CEO
of Sharewhere Earth Co.
King Johnny Wizard

-

"I just brought TERROR to someone else, under the "American"
flag, and that is just not what I joined the "American" Army
to do." - dying needlessly for the enemy of GOD antichrist
responsible personally for the treasons of 911 with his
zionist neocon partners of EVIL.

-

/ / President Shimon Peres has called on the world to unite
against Iran and to force it to abandon its nuclear weapons
program. \ \

Let Jews of the World rise to demand Peres "The Devil", be
put to death for alleging a FALSEHOOD to murder Humanity
for our stolen religious values. Peres is the actual Devil.

No, seriously. I am as surprised as anyone.. No, seriously.

Signed,

Poor Jew Johnny, the richly Magnificent!

/ / DCI said the children confessed to the charges
brought against them after extended periods of
interrogation, which occurred before their court
appearance. The report includes personal testimonies
from children that expose physical and sexual abuse
at the hands of the Israeli army and brutal treatment
during lengthy periods of interrogation. At the end
of the interrogation process the children were told
to sign papers, despite not knowing what they were
signing. \ \

Realize: American tax payers fund this unquestioningly.

-

http://www.talkleft.com/search?string=haditha

All military "Judges" must be arrested for TREASON, tried on
the decisions they've made as unqualified. And on those
decisions unjustified, as on the charges of murder, THEY, will
be put to Public Judgment for a death sentence gloriously for
freedom and country, I will be assistant Prosecutor, who will
speak facts, unlike bushite, who calls every "foreign fighter"
al-Qaida (except the REAL General Mahmoud Ahmad) - and bombing
victims "SUSPECTED" women-loving-child-schooling-Taliban.
Death to the bushite my friends, death to the bushite enemies.
These demon nazi fukers believe that those who bomb cities
indiscriminately, wouldn't be put to death for the defense of
our communities in Christ. I, Christ, intend to change that
by example. Americans will pay $25,000 a head for every nazi
bomber, or those who fly in the Apache, captured, tried, and
put to death as the Satanic bushite enemies of Creation. Kill
a bushite today why don't YOU lover of GOD as Just Causes to
save Our dying Universes? Those who victimize ourselves as
the innocence of Humanity, are going to answer to US
scientifically. Death to the bushite, death to the enemies of
America.

-

The King of America - Citizens Face Full Asset Seizure

http://www.rense.com/general77/asset.htm

/ / "(ii) to have materially assisted, sponsored, or provided
financial, material, logistical, or technical support for, or
goods or services in support of, such an act or acts of
violence or any person whose property and interests in

property are blocked pursuant to this order; \ \

So, those who don't support the return of all stolen monies from Iraq, who continue to undermine Humanity's chances for Justice in Iraq, (like every neocon LIAR and foxnews broadcaster, lawless mercenary antichrist disciple, or Haliburton shareholder,) needs their assets seized, and tried publicly for treason as war criminals. Every war profiteer holding more a one hundred thousand dollars will be hunted by the will of Humanity. so says - The Son to God as Man to men.

Bush To Veto Ban On Mercury In Vaccines
http://thimerosal.worldwidewarning.net/www/archives/59

/ / "Under the current administration, mercury has been and will continue to be knowingly injected into the youngest of American citizens. The controversial mercury-containing preservative thimerosal has been linked by thousands of parents as being the cause of their children's mercury poisoning and autism." \ \

Please, I beg you as the Son of Man, to fight back against those who threaten the lives of innocent American children, by forbidding defenses for US, the People. As recognized King of my forsaken World, this wouldn't happen I'm telling you. Support my rise to tax every American ten cents to start up my company of accountability. Running on free open line communications where ANYONE CAN CALL US, and call me a Jerk, just don't expect I wont fairly defend myself. Live broadcasts out in the fields, trumping evil demons by the power of the word. These individuals responsible for criminally victimizing American children, need to be arrested from continuing their action against our families. Support US please, to work on Just causes for the betterment of the human species, Or don't and die unworthy you bunch of bushite nazi savages.

We Have A Problem Here

Look, Bush closed investigations on 911 immediately, then started firstly on Iraq, for war mongering thieves, with General Ahmad escaping un-accosted for the neocon enemies. Not relevant? Your Constitution is laying undefended, a National act that can not be done by any other terrorist group but those who claim your freedom rights denied by bushite command. Not treasonous? Look Condi, the demon 911 nazi witch PERSONALLY assisted in dropping more than seven million land-mines on Lebanon indiscriminately in Your terrorized dying names. Hate Life and God as yourself do You?

Don't anyone be deceived that the neocon enemies minimally assisted these crimes by refusing to allow US pursue the evil

doers by following the actual crime scene leads, but we lack REAL leadership skills that are naturally required to see molten Iron flowing like water from the 911 towers on YouTube. Oh golly gee, who is that theatrical man from Canada with all the answers on Justice for Peace with Freedom Ruling Supreme? with atheists and everything? A brilliant man given next to no chance at receiving acknowledgment in Bushite media amerikan impires.?

Ray McGovern on 911 broadcast nation-wide on the coast to coast radio network "What we need here is an investigation. There are answers out there, but no one has pursued the answers." Similarly, there are questions that we isn't [allowed] figuring.

"No one has pursued the answers"? Come on Ray, don't tell US, you have no internet access, or haven't seen the video of molten iron flowing like water... blahblahblah

http://www.peaceandjustice.it/impeach/

/ / Executive members of the American Israel Public Affairs Committee lobbied Congress to pass Iran sanctions bills. \ \

These DEMONS need to be arrested, tried, and EXECUTED for TREASON. There is no evidence against Iran to substantiate their DEMON LIES to murder millions of People for the pleasures of the sadistic zionist enemies of Human Life, enemies of GOD as LOVE. Just because repuglicons like Liebermann, take bribes to murder US folks as the innocent, doesn't legitimize their treasonous conduct against YOU, my freedom loving dying brothers and sisters. Stand up for Jew Boy Johnny why don't You.

Who as America will bother to care they die by naked zionist criminal command? Johnny Wizard has been screaming for help to America, begging them to pick up their phones leastly, to air concern for the survival of the Nation, for YEARS! to publicly challenge happy happy, joy joy pro-child killer demon enemy George Norry and bullshitter no-national thief of Life Art Bell, and they've near completely refused while laughing and singing by 'who cares for you' zionist news command. They, as America's Coast to Coast voices, would rather richly die YOU sacrificed for CRIMINAL zionist Israel, (Israel, where the government leaves actual Jews to die in the streets starving as garbage dumps, to make it look good for MORE giving American charitable donations to disappear elsewhere) before saving the lives of THEIR VERY OWN. Americans don't seem to care they die by their own unwillingness to communicate openly for Justice. I ask you again, to spare me a few dollars so I can feed myself. I am actually, near starving, and never in my most feared nightmares, thought this

world, with our communication technology, would leave me without any financial assistance. I seriously need to eat. Please help me, by supporting our cause to not starve to death. If you appreciate my words in defense of the once great Human race, donate a few dollars to this cause. Justice and Freedom for all, especially God as Just, and worthy our praise

Peace.

FEMA covered up toxic danger in trailers given to Katrina victims
http://www.wsws.org/articles/2007/jul2007/fema-j21.shtml

I'll tell YOU again, CBC, CNN, and FOXNEWS knows the bushmob did 911, and lie to you entertainingly to sacrifice even more of US to the demon antichrist forces of evil.. While I ABSOLUTELY destroy bushite with joy for God and the defense of love.

/ / Support me, or fail to recognize true wisdom when it speaks to you of need for desperate change to save your dying selves. No evidence against an accused is US being truly abused.

"These are not terrorists, they are not al-Qeada, they are ordinary innocent men, women and children." \ \

-

TRAITORS TO LIFE

"I told him, there's women and kids in that room," Lance Cpl. Humberto M. Mendoza said of Lance Cpl. Stephen B. Tatum. Tatum's response was, "Well, shoot them,"

If Americans don't proudly put to death Tatum, on behalf of the Family that lost their son, their Marine, Johnny will formally conclude, Bushite america is an ungodly evil nazi fascist state of intolerance and hate to US, the Great Human Race. Bushite amerka does not own Freedom, nor do they own our rights to be Just. Join me in demanding the Public execution of the satanic demon liar Tatum, on his Public insistence that murdering innocent families to thieve from for the neocon, is a crime not warranting the death sentence enforced by any family man. Death to the bushite. death to the enemies of man. The neocons will be arrested, tried, and executed for the crimes of 911 as traitors to Life.

Bush Outlaws War Protest - Citizens Face Full Asset Seizure
http://www.rense.com/general77/asset.htm

"Who cares? to listen to a dying unheard America",
as the growing richer ungodly neocon enemy traitors shrill.

-

Death to the bushite instead of the innocent loved in God

/ / IntelCenter issued a tacit warning that the footage may be re-hashed when they released the "new" tape to the media, but they failed to mention the fact that they released portions of the exact same clips in October 2003. \ \ amazingly - I witnessed blurred-out faces of those they claimed al-Qaida in another instance just recently. (Then, look at the dog fight vids that CNN and CBC refuse to show the dog haters faces in..)

I say American taxing payer folks, flip me some dollars, and I'll pay out rewards - after a moderate lunch - all to take these IntelCenter AL-QAIDA! - AL-QAIDA! - AL-QAIDA! straight to public trial, then public execution for high treason - like holy fuk mon let's get real here People. Or don't and we die further for bin Laden's fear of cameras. Offer a 500,000,000 dollar reward for Zawahererri's crew to get the rest of this done quick like. I wanna rock! Death to the neocon enemy LIARS, death to those who WAR - WAR - WAR innocent Humanity for the continuing bushmob's escape plan from nowhere. See? Heaven or Hell? YOU DECIDE.

Don't EVER forget, the private company Aegis has been officially found dressing up as AL-QAIDA! - AL-QAIDA! - AL-QAIDA! to murder pro-western forces in Iraq, while desecrating Elvis. Elvis Presley. If you don't love Elvis, there is something seriously wrong with America. Now yous messing with a real son-of-bitch. HeY!, question: why don't Americans kill a bushite for Yourself bud? - because Bushites insist "we're" willingly being led by the antichrist enemy of all human life as Satanic LIARS who intend to cheat ourselves of freedom through self respect. Pro-neocon-media enemies are nazi savages, and I don't like it..How about you?

Death to the bushite instead of the innocent loved in God

-

Time is Up

Al-Qaida Kagan "Al-Qaida, their whole strategy revolves around generating sectarian violence, because that is how they embed themselves within local communities "

What?? For friendship?

What is the demon TRAITOR to HUMANITY in America saying about the reasons he embeds an Iraqi under 50 odd divergent NEOCON labels? Wouldn't most Al-Qaida take great joy in killing a bushite nazi grunt like any real Family man would also? These LIAR dumfuk grunts who cheer "whore yeah", routinely, can barely read or write, so, how possibly does this FOXNEWS expert, expect such ungodly antichrist forces to delineate

Al-Qaida from the local communities they PROVABLY indiscriminately bomb as Satanic?

Kristol and Kagan: 'Put Everything' Behind Escalation So We Can Bomb Iran and Syria

Kristol and Kagan MUST be put to death for treason against America, treason against Life, treason against GOD. They both have continued to Publicly advocate murdering more innocent peoples indiscriminately they call, "Al-Qaida", all to rob further monies from an undefended America. It is easily learned by any as all, the victims of bushite tyranny are exclusively, US, The People, guilty of nothing but our shared love of GOD. Remember forever: there was NO JUSIFIED REASON for bombing PEACEFUL Samara, NONE! that bombers confess was done as ordered by Allawi INDISCRIMINATELY, all for getting killed Marines sent in later for more stolen cash from America. P2OG. [hundreds of bushited Marines died rightly almost immediately - (wow eh?)] A Satanic action, Kistol and Kagan, both blame without thought to question on "Al-Qaida".

The action of Satanic bushite bombers targeting Samara as war criminals is FULLY documented.

Death to the bushite neocon LIARS, death to the enemies of Freedom for Humanity. My beloved friends of GOD, please, when you see the mute bushite, kill it for Christ, kill it for Love, kill it to defend your loved family. (Any soldier who doesn't proudly talk of how it hunts those British soldiers who kidnapped barefoot children and victimized them on video, is a soldier worth destroying NOW to defend GOD and Life from needless death.) I HATE the REAL demon antichrist Christ says.

Kagan "You rarely know in the middle of a war, what the outcome will be."

Johnny Wizard the Creator "I win."

-

/ / The US has also been backing some pro-western politicians like Iyad Allawi \ \

Do you know who Allawi is? Allawi confesses to blowing up school buses filled with children for "CIA" money. NOT THEORY. HE ADMITS IT AS AN ACTUAL SATANIC DEMON! Allawi, the truly insane mad man, confesses to having ordered the murder of doctors and nurses that treated wounded god loving women and children from Fallujah. It was these DOCUMENTED acts that had him thrown out of 'the CBC, CNN, and FOXNEWS TV expert scene as workable', all for fears that US humans might actually wake the fuk up on WHO is Our True Enemies here. All three, pro-private-bank zionist news stations are well aware

that the bushmob did 911, but lie to YOU as forsakenly dying
for their growing riches and world wide broadcast fame.

CBC National Newz - July 11th 'tens of thousands have died in
Iraq since the war against truth started.'

Anyway, these two Allawi incidences are fully documented, look
it up, then demand the "The US" pro-western politician person
quoted as supporting Allawi - be found guilty of CRIMES
AGAINST HUMANITY, Demand publicly, having the neocon zionists
EXECUTED by America, for America, as America. A Just America
that defends America from criminal madness. Or don't. Death
to the bushite, death to the enemies of Man I say.

-

ABCNEWS.com : FBI Called off Terror Investigations

A question Johnny Wizard has for America: Tell me, is
this not a treasonous act - for Bush to close criminal
investigations, immediately after the terrorist crimes
of 911? Shouldn't the demon enemy be put to arrest
for that godless act alone in this forsaken dying world?
A world left instead suffering further the tyrannies
of the war criminal ENEMY of all Human Life?

A refresher: the neocon will tell you openly, they live to
lie to the Public for cheating and stealing by murder of
US, innocent peoples purposefully enslaved by a made
ignorantly entranced TV audience that is repeated reminded,
we have no power worth respecting.

CNN, CBC, and FOXNEWS aren't taking are calls presently,
but just lie and tell US they do. Look to see, almost all
political internet traffic condemns Bush straight to hell
well he rightly belongs, but the polls still say no - WE,
seeking for Just cause, are the minority.. just roll over
and die for the neocon betrayers to god and country, life
and loving.

-

George Bush "The same folks that are bombing innocent
people in Iraq were the ones who attacked us in America
on September the 11th"

George Bush 'Iraq has nothing to do with 911, you bunch
of nazi dumfuk grunting LOSERS. Whore yeah - praise Satan
- die America die. I mean... I love Jesus'

So it was as I thought too: the direct co-operation of
the joint chiefs of staff assisting General Ahmad, in
committing the murder of thousands in America on 911
for the neocon TRAITORS, as the same 'escaping' enemies

today, responsible for 'secretly' ordering these
indiscriminate terror attack bombings against YOUR
Humanity for their continuing stolen pleasures as
Satanic.

-

/ / U.S. Marines are said to have killed as many as eight
unarmed Iraqi prisoners when U.S. forces attacked Fallujah
in November of 2004. \ \

HA! Trying to ignore the murder of more than 200,000 People
as if OUR lives have no real meaning. WE KNOW they murdered
everyone they could in around between 15-55, but went ahead
gunning for infants and the elderly too under Sattler. Look
it up. Death to the demonic bushite LIARS, death to the
enemies of Man, so says the Son to God as Man to men -
Kill the dishonorable bushite enemy and be Loved by all as
Savior.

-

DEMON MURDERER PETER POWER TRIES TO LIE HIS SOCKS OFF
ABOUT HOW HE MURDERS LONDONERS AS A FOR REAL TERRORIST
RECRUITER

[letter written as signed by Peter Power to MSNBC et al.]

/ /It is confirmed that a short number of 'walk through'
scenarios planed [sic] well in advance had commenced
that morning for a private company in London (as part
of a wider project that remains confidential) and that
two scenarios related directly to terrorist bombs at
the same time as the ones that actually detonated with
such tragic results. \ \

Little Peter Power is threatening literally BILLIONS
of US there. So.. what we a going to do my partners
in living? Die or survive? Your call...

-

Petraeus quietly urged his commanders to "get the word out"

Homeland Security Committee Chairman Bennie G. Thompson

/ / Thompson continues by asking Chertoff to further explain
what measures the country should take based on his instincts,
"What cities should be asking their law enforcement to work
double shifts because of your "gut feeling?" Are the American
people supposed to purchase duct tape and plastic sheeting
because of your 'gut feeling?'" \ \

Homeland Security Committee Chairman Bennie G. Thompson

NOTE: Americans are literally paying billions for Chertoff's
THREAT of "gut feeling". Billions, while the neocon walk
away from MURDERING Americans on 911 with the bushite on
America's Coast to Coast radio network, claiming they don't
know you know, nor, ever will. They'll tell you, blame the
shadows in the New World Order, but don't rely on evidence
to form your conclusions on who PERSONALLY is responsible
for criminal actions against YOUR rights to be free as
alive. Evil is real my friend, evil is real. Death to the
bushite, death to the enemy LIARS of human kind. Death to
the enemies of Love and God. Death to the enemies of Life.

"A dead Iraqi is just another dead Iraqi... You know, so what?"

These demons are murdering god loving people as enemies to
Humanity with the nazi assistance of corporate news america.
Will YOU please, support my rise to speak publicly challenging
anyone who disagrees with me, GEORGE WALKER BUSH needs to
be arrested immediately for 911. Peter Power needs to be
arrested for the London bombings. Sattler, Blount, and Russell
need to be arrested, tried and put to death for WAR CRIMES
against Iraq, along with those responsible for other
indiscriminate targetings against innocent PEOPLES for
the zionist neocon god betrayers hidden in shadows as
the un-known "Joint Chiefs of Staff" demon enemies.

Fight Back for Christ Sake God Damn You

"Another Wizard's World Wide Work of Wonder audio spectacular!!!"

http://houston.indymedia.org/uploads/2007/07/fightback316.mp3
http://neworleans.media.indypgh.org/uploads/2007/07/fightback316.mp3
http://cleveland.indymedia.org/uploads/2007/07/fightback316.mp3
http://www.ntimc.org/attachments/jul2007/fightback316.mp3
http://boston.indymedia.org/usermedia/audio/13/fightback316.mp3
http://newmexico.indymedia.org/uploads/2007/07/fightback316.mp3
http://istanbul.indymedia.org/uploads/2007/07/fightback316.mp3
http://rochester.indymedia.org/usermedia/audio/13/fightback316.mp3
http://pr.indymedia.org/uploads/2007/07/fightback316.mp3
http://www.stlimc.org/usermedia/audio/13/fightback316.mp3
http://english-cyprus.indymedia.org/usermedia/audio/13/fightback316.mp3

http://mediamatters.org/items/200702260008

/ / Wash. Post parroted White House claim that Iraq war was
authorized by U.N. Security Council \ \

Treason charges must be sought against zionist reporters
who LIE with such blatant disregard for your freedom in America.

-

The fascist control bushite, don't like You to think
independently for Yourself, for we independents out here

make them look as stupid as they are. Thank you very
much for that not so secret info.

-

The Other War: Iraq Vets Bear Witness
Chris Hedges and Laila al-Arian, The Nation

/ / Many said that these acts were perpetrated by a minority.
But they nevertheless described such acts as common and said
they often go unreported - and almost always go unpunished. \ \

/ / In addition to this sadistic and prolonged torture of the
innocent,
according to Gush Shalom, (Gush Shalom is a Jewish peace movement-
true Judaism is opposed to Zionism) \ \

Moore vs. Greed
http://www.crooksandliars.com/Media/Download/19156/1/TSR-Moore-Wolfie.wmv

Moore: "Why don't you [at CNN, CBC, and FOXNEWS] tell
the truth to the American people?"

Because as zionists, THEY hate a liberating people who want to
TRULY make their lives better by understanding Justice is Freedom.

-

"Al-Qaida" = "General Mahmoud Ahmad" = "bush's ungodly partners in
crime"

Why will you not as a member of Humanity, make the call
to the Coast to Coast radio network of demon evil nazi
savages who deny your legitimate concern be addressed freely?
Hate God and Love do you? Couldn't care less could you
for the giving lives of ignorant Americans as an American?

Death to the bushite, death to the enemies of Man.

-

http://www.liveleak.com/view?i=456_1177473318

/ / An [BUSHITE ENEMY] American soldier boasts of having tortured
[INNOCENT] Iraqis and making a 15 years old Iraqi girl commit
suicide after she had been raped. \ \

Tell US, who wouldn't take great pride in warring this boastful enemy
of Humanity? Or, are you like CNN, CBC, and FOXNEWS would suggest, it
is heroic - for all are heroic who DIE for the neocon?

-

/ / It is strange that the 'Secret Organization of Al
Qaeda in Europe,' the group that is allegedly
responsible, would have escaped notice (to say nothing

of their odd, 'double secret probation' type of name). \ \

Bushite are EVIL to all, as enemies to Human kind.
During Katrina, the bushites responsible for protecting
America, slaughtered everyone's confiscated pets for joy
and happiness. Three schools filled with hundreds of
dogs, cats, snakes and bats. There was no need to kill
everyone's beloved pet, but as the bushite will FREELY
tell YOU, it was fun to serve demonically as the
antichrist enemies of God and love. demand Justice for
God, demand Justice for Johnny.

/ / The mere fact that one can deduce a motive for a
person or a group does not mean that they perpetrated
the act...and it hardly suffices as proof of anything.\ \

Just try telling that to 'why work to make life better'
CBC, CNN, or FOXNEWS censors. Look at me!! They refuse
to acknowledge my documented info as REALLY important
to your continued ACTUAL survival.

Who fuking cares right? Certainly not the enemies
of America at the Coast to Coast radio network, who would
kill Americans for the rich neocons without question. It's
JUST American kids getting conned to die as bad guys.

-

DEMON LIAR George W. Bush "The larger point is, and the
fundamental question is, did Saddam Hussein have a
weapons program? And the answer is, absolutely. And we
gave him a chance to allow the inspectors in, and he
wouldn't let them in."

-

Afghan civilians caught
http://www.chicagotribune.com/news/nationworld/chi-civilians_bdjul08,1,3303701.story?coll=
chi-newsnationworld-hed

/ / The men told the same story, of how foreign troops
bombed their villages long after the Taliban fighters
had left, how the bombs killed women and children, goats
and sheep \ \

-

A quote from King Johnny Wizard, President and CEO

/ / Worried I'm going to love Life as truly honorable,
and Greater than those who openly lie to our soldiers to
have them unjustly die for no better good or reason
understood? \ \

-

JACK BLOOD
http://nw0.info

-

The Randi Rhodes Show
http://www.WhiteRoseSociety.org/rhodes.xml

-

God and America hate the bushite demon liars

http://www.commondreams.org/archive/2007/06/30/2234/

/ / NATO bombardiers thousands of feet above the ground
certainly don't know anything about the reality of the
towns and villages - and human lives - they are
destroying. \ \

-

'Up to 80 civilians dead' after US air strikes in Afghanistan
http://observer.guardian.co.uk/world/story/0%2C%2C2115846%2C00.html

/ / Witnesses claim a village in British-run Helmand was
bombed for three hours \ \

BUSHITE, THE ENEMY

It is not just a Muslim who sees the bushite as an enemy to
Humanity. These lawless savages have been acting without
accountability to anyone, because they are largely enemies of
America, who cowardly run from responsibility in America to
defend their own brothers and sisters from the neocon, and die
instead as/with rapists, torturers, and THIEVES.

"Al-Qaida" = "General Mahmoud Ahmad" = "bush's ungodly partners in
crime"

/ / How can those who want accountability be termed
anti-Iraqi? only through cowardly liars, is an American
told America's not going to hunt down those who stole in
their names as neoCONNED for dying. \ \

/ / Israeli officials have told us that the Finance Ministry
is budgeting basic social services at a percentage of their
known costs \ \ EVIL BEYOND WORDS. KILLING JEWS FOR MONEY.
We can really be something greater, while a murderous bushite
thief, a LIAR, can hardly read or write Liberty without
flinching from self contempt.

Jesus man, do I truly hate these zionist nazi thieving LIARS
on our magic TV shows who con our kids to die as bad guys.
How about You?

These naked LIAR enemies who bank to thieve more from Iraq,
Afghanistan and America, must be brought down by Humanity's
ultimate triumph over tyranny through Law. A just law, where
those accused without any evidence are Innocent, and WORTHY
yOur defenses.

-

Name One - A Journey into Self Discovery

http://www.indymedia.ie/attachments/jun2007/nameone__a_journey_into_self_discovery.mp3
http://maritimes.indymedia.org/uploads/2007/06/name-one_-_a_journey_into_self_discovery.mp
3
http://boston.indymedia.org/usermedia/audio/1/name-one_-_a_journey_into_self_discovery.mp3
http://www.stlimc.org/usermedia/audio/1/name-one_-_a_journey_into_self_discovery.mp3
https://israel.indymedia.org/usermedia/audio/3/name-one-ajourneyintoselfdiscovery.mp3
http://rochester.indymedia.org/usermedia/audio/1/name-one_-_a_journey_into_self_discovery.
mp3
http://cleveland.indymedia.org/uploads/2007/06/name-one_-_a_journey_into_self_discovery.mp
3
http://neworleans.media.indypgh.org/uploads/2007/06/name-one_-_a_journey_into_self_discove
ry.mp3

What Freedom do bushite war the innocent for to rape, pillage,
and murder as blind neocon followers of the 'lawless' demon
antichrist? Eh?

-

http://www.msnbc.msn.com/id/19461815/

/ / This paints the congress into a corner, because when Bush
and Cheney refuse to comply with these subpoenas, congress will
either have to impeach, or admit we are a dictatorship. \ \

VIDEO: Massacre of Palestinian Women and Children
http://globalresearch.ca/index.php?context=va&aid=3798

-

Israeli High Court permits torture of Innocent Humans
http://www.guerrillanews.com/headlines/14593/High_Court_permits_torture_of_Palestinians

/ / Israel has illustrated contempt for law and the value of
human life, or even possessing an ethical standard of moral
behavior with respect to civil and human rights \ \

Of what religion to any GOD, is this ZIONIST nazi
behavior condoned? Demonic thieving bushite enemies of
Man lie about such behaviors bring about 'freedom', but
who of US wouldn't kill such contempt to save the lives
of Our innocent beloved families? A bushite kidnaps
Iraqis routinely, (or orders the murder of those between
15-55,) and what of any real man present, doesn't
immediately arrest or kill such CONTEMPTIBLE bushite

loyalists to the ungodly enemy antichrist?

http://istanbul.indymedia.org/uploads/2007/06/name-one_-_a_journey_into_self_discovery.mp3
http://houston.indymedia.org/uploads/2007/06/name-one_-_a_journey_into_self_discovery.mp3
http://english-cyprus.indymedia.org/usermedia/audio/1/name-one_-_a_journey_into_self_discovery.mp3
http://newmexico.indymedia.org/uploads/2007/06/name-one_-_a_journey_into_self_discovery.mp3

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OBSTRUCTING JUSTICE FOR AMERICA

Tony Snow "The executive branch is under no compulsion to testify to Congress because Congress, in fact, doesn't have oversight abilities."

IT LOOKS like they are going to attempt making the move of BLATANTLY TREASONOUS war criminals acting to measurably now destroy yOur Freedoms in godless America. The Satanic neocon's 'faith', is in that YOU as an American, will watch the same corporate drivel that offers next to nothing to empower YOURSELF to speak Justly for a dying America. Instead of demanding 24 hour, wall to wall news coverage, of war criminals going down one by one by the will of Man to Justice, CNN, CBC, and FOXNEWS will broadcast your blind 'belief' that you are only a impartial viewer, who doesn't really care about dying right in front of yourself for the zionist's riches, and great worldly power of tyranny through lawless nazi bushite censorship.

"Al-Qaida" = "General Mahmoud Ahmad" = "bush's ungodly partners in crime"

Jesus man, do I truly hate these zionist nazi thieving LIARS on our magic TV shows who con our kids to die as bad guys. How about You?

/ / If Bush and his PNAC buds are innocent, then Investigate 911! What have innocent people to fear from a fair, complete and real investigation? \ \

They are guilty, so, of course, the demon Bush enemy, OBSTRUCTED JUSTICE FOR AMERICA.

I hear the national radio program Coast to Coast is still feeding us neocon lies. Why don't you make the call for Johnny.. believe in yourself for a change why don't you?, buddies??... I am Your god king. King Johnny I am. Champion of Universal Life! Not enough? Who cares?, to allow US speak on our broad casts as legitimate? Worried I'm going to love Life as truly honorable, and Greater than those who openly lie to our soldiers to have them unjustly die for no better good

or reason understood? Let us make life better than the neocon envision, and support our rise to popular acclaim by allowing US to speak openly for public challenge in defense of America.

Death to the neocon soldier, death to the enemies of Man.

-
True US Bush Iraq-Afghan Wars Deaths At 21,000
http://www.rense.com/general77/true.htm

"In the last four years of war in Afghanistan and Iraq, the unreported death toll of American military personnel is in excess of 20,000 (20,871)"

It's in cowardice that 'Americans' don't speak out for the lost 'loves' of their dumber than dumb sons.

-

Thinking of vacationing in occupied ungodly neocon aipac israel? Check out the criminal zionist's 'best' selling point...

ISRAEL PEDDLING WHORES TO ATTRACT TOURISTS
http://desertpeace.blogspot.com/2007/06/israel-peddling-flesh-to-attract.html

[The freely self confessed child murderers of the IDF, tell US as demon liars, they're "Jews". Anyone in Israel KNOWS this factually to be so. For, the zionist forbid 'by law', to allow military service from anyone in Israel who disagree that God would will the thieving and murder of the completely innocent in GOD accepting without question. Now why would YOU want that?]

The nazi IDF does what Canada's dope pusher O'Conner suggests we accept. Demon enemy bushite in Afghanistan murder children without real understanding 'by accident', [no evidence is shown to ANYONE, just treasonous demon evil bushite necon spewing, "red handed"] lies after lies, while, the Taliban, we are told, are so much worse, because they would murder "ANYONE." Make sense? No. Remember: (The bush regime has been found funding Al-Qaida in Iran to commit terrorist acts against COWARDLY soldiers without free minds to speak in their own defenses.)

/ / The group is demanding his impeachment not only for his crimes against humanity but for lying to the American people about his worship of Satan. \ \

It almost makes me laugh, and then, I push to remind, we are so very far from where civilized is dreamed to reside. Look, think of US as actors, (because that is who we are,) and support my rise to proclaim by the will of a suffering for real human kind. Believe in US, as if your life depends on

it, because it does my friends, because it does. Live free or die unwillingly.

cause I am just,

King Johnny Wizard
President and CEO

-

Christ in America - Death to Our Enemies

"The most powerful audio performance of GOD since never!"

http://neworleans.media.indypgh.org/uploads/2007/06/christ_in_america.mp3
http://www.stlimc.org/usermedia/audio/6/christ_in_america.mp3
http://newmexico.indymedia.org/uploads/2007/06/christ_in_america.mp3
http://melbourne.indymedia.org/uploads/christ_in_america.mp3
http://boston.indymedia.org/usermedia/audio/7/Christ_in_America.mp3
http://houston.indymedia.org/uploads/2007/06/christ_in_america.mp3
http://english-cyprus.indymedia.org/usermedia/audio/6/christ_in_america.mp3
http://cleveland.indymedia.org/uploads/2007/06/christ_in_america.mp3
http://rochester.indymedia.org/usermedia/audio/6/christ_in_america.mp3

I BEG the Christian men of Earth to help GOD

/ / The currently ongoing "pacification" of Baqubah, a city with 300,000 inhabitants, by some 10,000 U.S. troops is using the same methods as documented in the NGO report with regard to Fallujah \ \

I BEG the Christian men of Earth to help GOD in destroying the lawless bushite nazi thieves, who lie cheat and steal from Humanity for the 'escape' of the ACTUAL zionist 911 perpetrators. Death to the LIAR bushite, death to our enemies, so say Johnny America, Lord and Savior.

Coast to Coast radio hosts MUST face treason charges as enemies to Life as we know it. They lie to the American child, to trick them into sacrificing more lives for the tyranny of the antichrist.

-

/ / Cheney's office has refused to provide his staff with details regarding classified documents or submit to a routine inspection as required by presidential order, \ \

It seems Cheney wants to go it completely alone as an escaping war criminal in America eh?

Demon G. W. Bush "Our responsibility to history is already clear: to answer these attacks waged against us by stealth, deceit and murder and rid the world of evil."

"Deceit" and "murder" to rid our world of justly what dum-uk enemies?

Kill a lawless bushite THIEF for America why don't You Patriot Warriors?

-

Bin Laden may have arranged family's US exit: FBI docs

-

AMERICA HATES BUSHITE

Nationally broadcasted every day across America, Mr. George Norry publicly supports the murder of innocent Arab children, and I'm beginning to really hate a silent dying America for it. Speak to defend the innocent in this world American, or die yourself from self contempt.

Bushites war LIFE itself. So then pleads I again the Son to God, as Man to Men: war to kill the enemy bushite nazi savage thieves, for real Freedom is waged truly by Just causes. The mute, pro-censorship/tyranny THIEVING bushite savaged nation, has NO EXCUSE for the crimes they have committed in our dying names. I demand our voices heard internationally for Justice as Freedom is Godly.

To, with a Love in your Heart for GOD, kill such contempt for Human life, is to serve American freedom to the last bushite neocon breathing. Death to the neocon soldier, death to the enemies of Man.

/ / "They can try to have their votes of no confidence," the president said, "but it's not going to determine - make the determination - who serves in my government."

MY government? Now that's entitlement. And you thought George Bush didn't have a vision for America \ \

Hitler, the mad man, wasn't as insane as our demon enemy George Bush Jr. is.

/ / The [BUSHITE ENEMY] US has said it would refuse any request by Italy to extradite the accused [satanic bushite torturers of completely INNOCENT PEOPLE]. \ \

Christ, The Son of Man, Begs the Godly Men of Earth

Christ, The Son of Man, begs the godly men of Earth, to judicially bill on sight, any neocon soldier who supports the carnage waged in Afghanistan as cop killing dope pushers. They shoot innocent women and children dead in the streets for humor, and bushite pirates at CBC and CNN, state bushite in Afghanistan are doing a good thing helping the bushmob escape the crimes of 911 by warring for Muslim fundamentalism,

persecuting INNOCENT women and Christians, while for entertainment, bomb innocent families running for their lives from a Holy Church. Soulless child killing soldiers who CBC execs would tell are our DEMONIC heroes. Lawless dope pushing cop killers have got to go down dead screaming, instead of the innocent - YOU and me they target for MURDER. Death to the dishonorable bushite THIEVES, death to the enemy neocon LIARS of GOD and man.

We can really be something greater, while a murderous bushite thief, a LIAR, can hardly read or write Liberty without flinching from self contempt.

Kill a bushite LIAR, why don't you my brothers and sisters of the faith in something greater than bushite godless tyranny?

Brig. General David Fraser - former nazi commander of NATO who 'okayed' the bombing of defenseless innocent Afghan women and children for the Satanic enemies of Man, stated on CBC, he liked killing police officers, along with innocent women and children, (deliberately targeted for the pleasures of the demon antichrist) because, Afghanistan's children hope to learn. See? The bushite 'will' murder all our children and teachers on hope that we will never learn the Taliban, led by "Omar the Just", were loyal to Christ as REAL American Freedom, when publicly demanding evidence to form your conclusions. Thus is why the ENEMY to LIFE neocon state on YOUR TV and radio, WE must never be allowed to speak openly with the Taliban regarding the FACTS. Because if we did, neocon pension thievers would be hunted down in the streets for public trial, and then gloriously put to death by Christian values committed to TRUE freedom from lawless godless zionist LIAR tyrannies against Mankind - YOU included.

George Norry and Art Bell are the most evil of bushite, who as betrayers of the Human race, deny soldiers to know: General Ahmad funded Atta. They will both support the murder of Your American Son or Daughter for further zionist evils, before allowing true open line communications, to defend ourselves from the lawless demon enemies of Man. Do something about it, or don't. Let TRUTH set US free.

Instead of making an easy phone call today for your dying brothers and sisters, die as Satanic bad guy enemies of Life on Earth, sacrificed in cowardice to the real demon antichrist, and see if we, the true, strong, and free, care. The Son of Man SCREAMS before coming home to GOD'S America: We are coming to destroy Satanically lawless bushite enemies, all for the love of God, we shall succeed my friends, we shall succeed. I will not willingly live in a forsaken world with LIAR zionist war criminals conning US to believe, God is not Great, True, Strong and Just.

Die bushite die!

-

/ / A manifest showed the goods [BUSHITE HEROIN] were to be
shipped from Kabul to Dubai and then on to Canada. \ \

"We have nothing to do with poppy eradication. We stay away
from [pro bushite heroin to kill YOUR kid with] it as far as
we can," Maj. Steve Graham of the Royal Canadian Dragoons

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To Kill a Bushite, is to be Heroic

To further murder as these ungodly bushite liars do today as
our suffering Mankind, is to blindly swear public allegiance
to the for real DEMONIC antichrist THIEVES. Bushite enemies
are evil nazi dumfuk scum, liars who cowardly watch America in
her weakness be high jacked, and squeak nothing for Just words
in our REAL defense for dying.

JOHNNY ROCKS

http://neworleans.media.indypgh.org/uploads/2007/05/johnny-rocks.mp3
http://cleveland.indymedia.org/uploads/2007/05/johnny-rocks.mp3
http://english-cyprus.indymedia.org/usermedia/audio/12/johnny-rocks.mp3
http://media.indypgh.org/uploads/2007/05/johnny-rocks.mp3
http://miami.indymedia.org/uploads/2007/05/johnny-rocks.mp3
http://chiapas.indymedia.org/local/webcast/uploads/johnny-rocks.mp3
http://japan.indymedia.org/usermedia/audio/12/johnny-rocks.mp3

AMERICA'S Mr. O'Really responding to accusations that FOX NEWS
refuses to cover the war in Iraq on behalf of concerned,
AS DYING, American families, [and forsakes Christ as demon
betrayers to the paying victim audience] Stated:

"Do you care if another bomb went off in Tikrit?
Does it mean anything? NO! It doesn't mean anything."

Why should WE continue to silently die unjustly victimized?,
for the bushite's contempt of Mankind censored?, the Eternal
Son of Man to GOD forever answers correctly.

Kill a bushite as the Love of Justice for Humanity

The Son of Man BEGS all honorable men to defend Life
from bushite enemies of GOD who murder, rape and steal from
innocence through lawlessness as thieves of everyone. Please
kill the bushite for the love of women and children. kill
the bushite for the love of GOD. Please, defend ourselves
further hardships by supporting immediate war crime trials
to begin against all neocon traitors who LIE OPENLY to
kill America's America as enemies to truth, as enemies to
Christ.

Charles Goyette Interviews Scott Horton
http://dissentradio.com/charles/aw061107scotthorton.mp3

/ / Look, do you understand what these [TV politico] people
are saying?

These people, one right after another, are up here talking
about a nuclear strike! [more bushite DEMON mass death and
suffering against Life] On a country that hasn't threatened
US?, hasn't harmed US?, has no capability to attack US? Do
YOU understand the madness we have descended to? \ \

'Kill Anyone Still Alive': American Special Ops
http://www.atlanticfreepress.com/content/view/1784/81/

Can you not as a American Man, destroy bushite brayers to defend
innocent life? Americans could not care less presently for
the value of Human life. Americans do nothing to defend
their lives, but officially plan to murder more for the Satanic
demon antichrist in silence. Out of millions, how many even
bother to make a phone call to talk radio against the neocon.
how many? Five or six? Seriously.. How many? I know bushites
are demon liars for the neocon, but is it really impossible for
"Americans" to try speaking?, in the face of murdering millions
more forsaken by enemy mortal, pro child killer George Norry?
George Norry too nice of a guy to even bother question the value
of American children? The THIEF Art Bell's voice too soothing
to care that neocons own pirated America, and on everything she
stands whoring as WAR CRIMINALS to the FOR REAL antichrist?

Death to the lawless bushite, death to the enemies of Mankind

http://melbourne.indymedia.org/uploads/law_of_the_land_-_we_rule.mp3
http://imctj.espora.org/uploads/2007/01/law_of_the_land_-_we_rule.mp3
http://austin.indymedia.org/usermedia/audio/7/law_of_the_land_-_we_rule.mp3
http://arkansas.indymedia.org/usermedia/audio/7/law_of_the_land_-_we_rule.mp3
http://pr.indymedia.org/uploads/2007/01/law_of_the_land_-_we_rule.mp3

God is Great

Again, George W. bush did 911 with General Ahmad, but CBC
zionists, actual treasonous LIARS, actually smile to dying
Canadian soldiers with only true contempt. CBC kills Canadian
kids, with their intentional demon lies, trying to subvert
Justice for God and Johnny. In fact, yesterday, they did a
special, all on how "God is NOT Great", giving that bush bitch
demon LIAR, all the space to pontificate it's hatred for
Wisdom, Science, and GOD, with only nods and smiles from the
'illiterate' hord. Remember: A zionist KNOWS it's an enemy of
Humanity when it supports dropping seven million land minds to
murder indiscriminately OUR CHILDREN for decades, or stealing
a Christians Home because they say God says Jews would do such
ungodly acts. Blame innocent Jews the holocaust denying
zionist shout, of which not one, is a Jew. Like me.

To Kill a Bushite, is to be Heroic

Pro child killer George Norry, enemy of the American soldier, still blabs about how more must die unjustly for bin Laden with LIES, knowing full well, video of steel flowing like water from the WTC exists, and that General Ahmad funded Atta. George Norry is a traitor to the FBI, who further plans more to die sacrificed under the censorship of the tyrant antichrist. Who cares I ask about America truly dying as neoCONNED, for George Norry has millions to not take your calls for protection, and honestly, 'Americans' couldn't care much less for Our Humanity's future. Live free by defending liberty by killing pro lawless pro torture pro fascist bushite enemies my friend, live free by defending Yourself and GOD.

/ / The U.S. State Department recently issued a report calling Sudan a "strong partner in the war on terror." \ \

The high jacking Bush regime is supporting financially a TYRANNICAL 'government' that openly practices Genocide, as just the sort of "American" partner to assist in determining which further murder victims are terrorists. While the same demon administration confesses to FUNDING middle eastern al-Qeada to commit TERRORIST acts in Iran, as demon evil tyranny against the sleeping Sheeple. Again, it is fully confessed that the Satanic bushmob is pro terror now. Death to the enemies of Freedom, death to the bushite betrayers of Life instead of YOU my innocent friends. Instead of US.

/ / US 'used forced [SLAVE] labour to build Iraq embassy' \ \

Kill a bushite LIAR and be loved by God as Life is True.

DOWN WITH EVIL, UP WITH FREEDOM.

-

Love to God Gives US Strength

The Son of Man begs the Men of Earth to defend Ourselves from the unholy forces of our tyrannical enemies. Death to the ungodly bushite thieving LIARS, death to the ungodly enemies of American children everywhere. GOD praises all Men, who kill the murderous bushite enemies of Just causes. The THIEVING satanic bushite forces, speak only contempt for GOD on our demandings of the public execution of the boastful terrorists, like the bushite who video taped the murderous assault of OUR kidnapped bare footed children, or murdered Iraqis while desecrating ELVIS, done all to please the "escaping" satanic demon antichrist zionist, Our Mr. bush Jr., who with his private business partner, General Ahmad, actually committed the ungodly treasons of 911 in a land of blind men sleeping., according to the eternally Honorable FBI anyway.

Death to the ungodly bushite thieving LIARS, death to the ungodly enemies of American children everywhere. GOD praises all Men, who kill the murderous bushite enemies of America's America. "The Liar" Hannity's America, can go it alone as treasonous liars, who boastcast a con to 'neutralize' America; 'finding' that we believe their demon lies about how one dies sacrificed 'Heroic' without any IMPORTANT questions answered. do we do?

To Kill a Bushite, is to be Heroic

To further murder as these ungodly bushite liars do today as our suffering Mankind, is to blindly swear public allegiance to the for real DEMONIC antichrist THIEVES. Bushite enemies are evil nazi dumfuk scum, liars who cowardly watch America in her weakness be high jacked, and squeak nothing for Just words in our REAL defense for dying. Play pretending their actually real men, because to really be so, requires real strength. Not bush bitch Marines "WHORES YEAH!" strength, where they cowardly can't figure to defend America from ungodly war criminals. War criminals who deliberately set them up with Satanic 'black magic' to be killed in criminal actions. P2OG. But see?, the bushite fodder, can't care enough for Life to read, because it already knows like the zionist, it's an ungodly coward and a thief, as siding to lying and censorship, this will out work for evil doers in the long run without any consequences to themselves as Our sworn eternal enemy.

Bushites 'think' that being Satanic brethrens for the LIAR neoCON, they'll die sacrificed not seen by all Patriot Warriors, as a dead coward - too fearful to stand as a godly Man for true accountability to living Life honorably. Cheney, McCain, and 911's gooliannie believe, You can only TV 'see' them protected Satanically by "Molech" [THEIR DEMON COG] Immune from REAL American Justice the bushite bray, We are told they believe so anyway. By Satanic command, 'inconceivable' to see the bushmob up on high treason charges... Oohh. Yeahhh.. I can see that going for real - quite excitedly I am about saving innocent lives. So, let's get done what needs to be a doing to save ourselves, so we can get this talking all behind us now, and reach for something truly breath taking as awarding,

Your Servant,

King Johnny Wizard
President and CEO

-

Why should WE continue to silently die unjustly victimized?, for the bushite's contempt of Mankind censored?, the Eternal Son of Man to GOD forever answers correctly. We can really be

something greater, while a murderous bushite thief, a LIAR, can hardly read or write Liberty without flinching from self contempt. Bushite tyranny is a dead end road paved with missed opportunity. change your evil ways in other words, and join the living side that's light to know what we are, in deed, looking at here under the dying spoils of bushite, "we pay" misfortune. To hell with Satanic demon devil worship by the President of the United States, We, the People answer, for now anyway, we have some really serious business just presently, and we really don't need to be any more reminded about Mr. Bush's satanic Devil, demon whoreship, of, "Molech", a religion practiced to deceive America into sacrificing our kids for cash with YOUR blood.... Tricked. Tricked. Tricked.

Nationless bushites who blindly war Life as the neocon enemies, war for the 911 perpetrators to escape American Justice. that is why I, as of GOD, cheer to hear the deaths of these pro torture, pro theft, pro Satanic enemies of Man. They confess freely to targeting INNOCENT People for murder.

-

CIA 'disappeared' seven-year-old children
http://pressesc.com/01181202133_39_names_enforced_disappearences

COFER BLACK is the "CIA" LIE, KILL COFER BLACK FOR TORTURING INNOCENT PEOPLE TO DEATH FOR THE ANTICHRIST. Death to the bushite, death to the enemies of Mankind.

-

New admissions of widespread prisoner abuse
http://www.wsws.org/articles/2007/jun2007/tort-j05.shtml

/ / The Bush administration is finalizing new guidelines for Central Intelligence Agency (CIA) interrogation methods that will give broad latitude for torture techniques \ \

These are crimes against Christ, and any 'Christian' who lawlessly participates in this pro-bush torture of US Humans, MUST be hunted down by the Patriot, to have the STANDING LAW in America enforced to institute the Death Sentence to those bushite responsible for such ungodly enemy actions.

-

Hannity interviews Johnny America

http://twincities.indymedia.org/usermedia/audio/2/kingjohnny.mp3
http://chicago.indymedia.org/usermedia/audio/2/kingjohnny.mp3
http://cleveland.indymedia.org/uploads/2007/05/kingjohnny.mp3
http://houston.indymedia.org/uploads/2007/05/kingjohnny.mp3
http://newmexico.indymedia.org/uploads/2007/05/kingjohnny.mp3
http://english-cyprus.indymedia.org/usermedia/audio/2/kingjohnny.mp3

http://neworleans.media.indypgh.org/uploads/2007/05/kingjohnny.mp3

-

Hillary "[DEMON] Bush pulled out the inspectors."
[DEMON] Bush declared, "and he wouldn't let them in."

In Hell

Firstly, the White house doctored the NIE in an act of HIGH TREASON.

Two:

CNN with Hillary acknowledges that the demon Mr. Bush pulled inspectors out of Iraq, but then... how is this not HELL to pay?

/ / Bush declared, "and he wouldn't let them in. And, therefore, after a reasonable request, we decided to remove him from power." \ \ HE LIED. Not the 'NWO', George Walker Bush, who Alex Jones tells US to look away, because he's only a puppet. Should not Bush be held accountable to the criminal actions he is PERSONALLY responsible for Christ asks YOU?

Arkansas GOP head: We need more 'attacks on American soil'
http://rawstory.com/news/2007/Arkansas_GOP_head_We_need_more_0603.html

Look, bushite DO exist as enemies of the Human.

800,000 Christians protected under Saddam, now killed under Bush
http://www.uruknet.de/?p=m33389&hd=&size=1&l=e

Look, bushite DO exist as enemies of the Human.

-

Neocon Soldier

Bushites who war as the neocon enemies, war for the 911 perpetrators to escape American Justice. that is why I, as of GOD, cheer to hear the deaths of these pro torture, pro theft, pro Satanic enemies of Man. They confess freely to targeting INNOCENT People for murder.

The Haditha perpetrators, if convicted, are looking at serving, maybe, a couple of years, for freely confessing to the targeting MURDER, of innocent women, men, and infants.

To, with a Love in your Heart for GOD, kill such contempt for Human life, is to serve American freedom to the last bushite neocon breathing. Death to the neocon soldier, death to the enemies of Man. - The Son of Man, as the Man of Men,

Johnny Wizard

-

CBC and CNN with FOXNews Calls him Al Qaeda, but his Jewish Father calls him Adam Pearlman, a godless enemy zionist, A thieving NAZI liar who hates freedom, who wants to kill INNOCENT Americans for his NEVER ELECTED neocon pro war buddies. Did we mention torture? See? The zionist KNOWS its OUR enemy. An enemy of Humanity, who counts that YOU personally will not phone Coast to Coast radio hosts to allow open line FREE communications. Oh well.. Americans are truly dying evil dum-uks.

-

Enemy LIAR of America, pro-child killer George Norry, "McCain is leading in all the polls."

-

PEOPLE

Who IS running this bushite nazi liar show, where they, our elite corporate media masters, kill our stupid kids with their flagrant naked monster lies, while refusing all calls for clarity, Johnny America really wants to know. Like immediately. Help us out here some man, don't be evil.

Demon bush told us Saddam wouldn't let inspectors in, and that's why he irrationally started this war against God conflict. Impeach him, then have him PUNISHED for high treason against a further dying as truly unheard from America - for that lie alone - we ALL could/should stand together as equals demanding re-dress for the innocent murder victims who've suffered for such contempt, and belligerence for the basic precepts of freedom as Justice, or G-D as Johnny.

People of Earth, know, these bushite soldiers war Creation proudly with repeatedly committing aggravated felons, and South African death squad goons, all to war Love for the neocon god haters. Who, as peenacking atheists, as their very own documents stress, would murder anyone of US for a stolen nickel.

Our Mr. Bush Jnr. "The war is for you or for us [neoCONS] to win. If we [neoCONS] win it, it means your defeat and disgrace forever."

Die bushite die.

King Johnny Wizard
President and CEO

-

Kucinich for President!
http://www.democracynow.org/index.pl?issue=20070524

Now, it's true, America's Alex Jones states Kucinich wants to take away all your guns, and is a communist, but, Alex as sometimes, is terrified of those who seek the requirements to defend freedom directly, as more specific. (Example: NWO isn't the name of the specific guy who financed 911 to murder America.) So, as a consequence, he gets near ridiculous with labels applicable to generalizations only dummies could believe blindly. With Kucinich campaigning on ACCOUNTABILITY, Alex Jones looks quite foolish. But, he's still trying. Thank god for that. Thank god for that. Talk radio in America should take open line calls on our ideas about how to actually plan to defeat these, found factually to be, traitors to God and Country.

JOHNNY ROCKS

http://neworleans.media.indypgh.org/uploads/2007/05/johnny-rocks.mp3
http://cleveland.indymedia.org/uploads/2007/05/johnny-rocks.mp3
http://english-cyprus.indymedia.org/usermedia/audio/12/johnny-rocks.mp3
http://media.indypgh.org/uploads/2007/05/johnny-rocks.mp3
http://miami.indymedia.org/uploads/2007/05/johnny-rocks.mp3
http://chiapas.indymedia.org/local/webcast/uploads/johnny-rocks.mp3
http://japan.indymedia.org/usermedia/audio/12/johnny-rocks.mp3

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http://electroniciraq.net/news/3087.shtml

http://scotland.indymedia.org/usermedia/audio/6/nazi_israel.mp3
http://italy.indymedia.org/uploads/2006/07/nazi_israel.mp3
http://media.indypgh.org/uploads/2006/07/nazi_israel.mp3
http://www.indymedia.no/usermedia/audio/6/nazi_israel.mp3
http://hamilton.indymedia.org/usermedia/audio/7/Nazi_Israel.mp3

MSNBC Poll: Over 400,000 (88%) Say Bush Should Be Impeached
http://prisonplanet.com/articles/may2007/210507_b_Impeached.htm

See? Canadians who TRUST CBC would never know by Paul Hunter.

-

Bush Successful at Permanent Legalization of Torture
http://www.prisonplanet.com/articles/march2006/070306Torture.htm

/ / The truth is that the Bush Administration has used the McCain anti-torture bill to codify a policy of torture that is now embedded in our legal system for perpetuity. \ \

McCain is some kinda demon enemy of God isn't he? To say publicly, he apposes torturing innocent people to death for the practicing Satanic bushite LIAR bad guys, leaves US thinking, shouldn't WE put McCain to death for OFFICIALLY

sanctioning such criminality? I'd easily, without a second thought, put to death all those FOXJunkies in that debate audience who cheered from hell with JOY, the prospect of torturing innocent people to death, 'if it means' such IRRATIONAL action protects "American lives". See? the Magic TV and radio people refuse to allow me or anyone to think through such absent minded ungodly EVIL intent. Example: If you take FOXNews' word for it, and 'knew' your potential victim knows for sure of an impending terror attack... ... .. . How so? See? demon enemy f-cks, the ungodly bushite nazi vermin haters of Justice measured, [who steal in MY America as TRUE EVIL DOERS,] forbid such wisdom communicated as understood, for that would mean, we'd have to allow the real Victims more air time.

And wise poor men such as myself would command respect and gratitude.

and together, WE'D be hunting down those bushite liars who torture innocent people to death for their satanic pleasures. For, you know it does warrant the Death Sentence in America, right? (You can thank Reagan for that...)

-

/ / In a move that hardly indicates that he was a terrorist plotting to attack a US government installation Tatar then went to the Philadelphia police department to complain that he was being pressured by someone into getting a map of Fort Dix and that he thought this had something to do with a terrorist plot. \ \

Didn't see this on our TV news either did You?

-

The King of the Jews is True Red White and Blue

King of the Jews
http://cleveland.indymedia.org/uploads/2007/05/the_king_of_the_jews.mp3
http://chiapas.indymedia.org/local/webcast/uploads/the_king_of_the_jews.mp3
http://melbourne.indymedia.org/uploads/the_king_of_the_jews.mp3

-

/ / On CBS' "Face the Nation," she claimed that intelligence errors before the war were "worldwide" even though the International Atomic Energy Agency's Mohamed ElBaradei publicly stated there was "no evidence" of an Iraqi nuclear program \ \

That from the 911 witch, who forbade a stop to hostilities IN AMERICA'S NAME against the innocent in Lebanon. Nazi Israel ADMITS to the targeting MURDER of any innocent persons who drive in a truck. Perhaps Americans. Who cares? Not CBC or

CNN they'll tell you consistently absent from the crimes scene.

-

Pill popping American GI teens are becoming.. CRACKHEADS!

http://www.zmag.org/ZMag/articles/march02levine.htm

/ / Dexedrine affect the same neurotransmitters as cocaine; and ADHD drugs and cocaine are both classified by the DEA as Schedule II psychostimulants (Schedule II drugs are legal drugs that have the highest potential for abuse and addiction). \ \

American grunts get FREE all the Dexedrine they can shoot

Do you know how a crackhead finds itself? Lost by indifference to the ultimate, only goal, more dope. Freedom Fighter? or crackhead WHORE, who hopes to find a dollar 'somewhere' to stave off it's crackmaster, the "American People", led by the un-elected demon dictator, our criminal Mr. bush Jr., as the true enemies of all Mankind. Bushites are on serious dope to be so dumb as cowardly accomplices to a traitor of themselves, that they would die as, before actually defending God's America - that they gave an Oath to.

I guess a soldier's word doesn't count for much in bushville.

The bushmob did 911 as traitors to God and Country, don't you know anything worth living for? my dying unjustly brothers and sisters? My friends, please fear not wisdom communicated by a REAL Man, for, we explain ourselves to the best of YOUR ability to listen simply. G. W. Bush used no evidence to form America's "conclusion" on who did US wrong on 911. So, Please, stop forsaking yourself, for, we're going nowhere. Support Johnny's call to demand open debate without censorship from the magic radio and TV execs, who hide in darkness, pretending to be our friends, while refusing intelligent dialog to answer any of our big troubles easily. Why? because largely, they're powerless without beating us down as giving 'Christ like' VICTIM so much - with their irrational ignorance for our survivals by the fittest. The fittest Ideas that rule this Universe, are the simplest, most easy to understand, but I digress about GOD'S greatness, for we know,. the corporate media elites as our voice, "Couldn't Care Less".

CBC just did a report about all the great heroin coming in from Afghanistan, that will still cause crime, and be illegal, (and maybe give you life in prison as an American,) but brought in with the help of the demonically evil bushite thieving murderous military, by the likely ton full to attack our direct family left un-protected, BY YOU PERSONALLY. And

guess what? THEY, our media masters, couldn't care less if they actually tried to be our good guys. Reminder: the god guys is good, the demon liar antichrist demon enemies who thieve from Life with censorship is bad. If they hide ourselves too far, they loose all around, up and down. So get to it. Or don't. Your choice. Life lived Now, or damnable death by cowardly design brought forthwith under your own power to do nothing under such terrible costs against our suffering natures.

Typical tyranny for media control over all of Life for the beginners is this treasonous betrayal against our Nature, by refusing to be honest about our potential to be far greater than first considered. If they'd only allow US to have open communications, all our worlds would be better living for it.

Demand Coast to Coast hosts allow America to defend America.

I want air time with the one and only real man in these here parts, Mr. Johnny America, our glorious make believe creator of all we perceive religiously, self realized. He's a genius!

-

No evidence against an accused is US being truly abused

http://melbourne.indymedia.org/uploads/johnny-rocks.mp3
http://alacant.indymedia.org/usermedia/audio/12/johnny-rocks.mp3

Help me gain access to speak freely for open challenge against Hannity, and of America's Coast to Coast Radio network hosts, who deliberately deny you to contend, we're really, one hell of a great bunch of People persons with rights God damn them.

Support Johnny's run for acknowledgment, and get US in the News why don't You. Let me be king for a day my American Kin. Make me a rich, near to dwell, well to do.

Get it done.

-

Like the NAZIS with jews. Zionist Holocaust Deniers that say otherwise, ('Fallujah never happened'), WE should just immediately put to death to save the lives of our remaining loved ones. Death to the murderous bushite LIAR thieves, death to all Satanic bushite traitor enemies of Justice for Man, proclaims I, King Johnny.

Dope Pushing Cop Killers

Support torture as a Zionist AIPAC Politician like demon McCain, and The surviving PEOPLE of the Messiah - will rise up to take you down as the ungodly enemy LIAR McCain clearly IS.

As so is the Satanically practicing (with Molech and
everything) repuglicons straight across the board, who, as a
few demoncrates too, support the CRIMINAL escape of the
bushmob through threats against the innocent LOVED by GOD
ALMIGHTY. A REAL GOD with A REAL SON. McCain has got to go.
Please, I, The Son of Man, the MAN of men, beg and plead again
to all able bodied persons, see the thieving bushite zionist,
kill it to defend Christ, kill it to defend America, kill it
to defend any or all children of LIFE. Kill it with the honor
and courage every REAL PATRIOT has to defend his own family my
friend, lastly, kill it for me. These naked LIAR enemies who
bank to thieve more from Iraq, Afghanistan and America, must
be brought down by Humanity's ultimate triumph over tyranny
through Law. A just law, where those accused without any
evidence are Innocent, and WORTHY yOur defenses. Get to it.

Kill any bushite bomber and be loved by God's America.

-

Nature of Good and Evil

https://israel.indymedia.org/usermedia/audio/2/thejohnnywizardcollection-nature-of-good-an
d-evil-christ-vs-antichrist.mp3
http://images.indymedia.org/imc/newmexico/the_johnny_wizard_collection_-_nature-of-good-an
d-evil-christ-vs-antichrist.mp3
http://chicago.indymedia.org/usermedia/audio/9/the_johnny_wizard_collection_-_nature-of-go
od-and-evil-christ-vs-antichrist.mp3
http://baltimore.indymedia.org/usermedia/audio/9/the_johnny_wizard_collection_-_nature-of-
good-and-evil-christ-vs-antichrist.mp3

Christians Demand Bush be Impeached for Worshiping Satan
http://www.roguegovernment.com/news.php?id=1845

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Lt. Denton to the completely innocent as god loving
'You die, you die, you die'

Lt. Denton must die. We apparently have him on video blowing
up People not guilty of anything. He shall die as the dope
pushing cop killer he is, and we'll use his brief existence as
a beneficial measurement to determine, which other demonic
bushite soldiers, who as bonafide 'evil doers', disagree with
such Just action - be put to death for our Freedoms also.
Simple for everyone to understand? We think so, so says the
Son of Man.

http://nhindymedia.org/usermedia/audio/8/christ_wars_bushite_enemies_for_the_love_of_our_l
iving_god.mp3
http://newmexico.indymedia.org/uploads/2007/02/christ_wars_bushite_enemies_for_the_love_of
_our_living_god.mp3
http://neworleans.media.indypgh.org/uploads/2007/02/christ_wars_bushite_enemies_for_the_lo

ve_of_our_living_god.mp3
http://pr.indymedia.org/uploads/2007/02/christ_wars_bushite_enemies_for_the_love_of_our_living_god.mp3

-

Death to the zionist bushite enemy forces

/ / After it was revealed by the Plaid Cymru MP Adam Price
that British trained policemen had tortured prisoners to death
with drills, we discovered, through the New York Times (!!),
that American intelligence officers had been working alongside
them at the Jamiyat police station \ \

Death to the zionist bushite enemy forces, death to the
ungodly enemies of Man who torture innocent people to death
for fun - expecting Johnny's America will not raise a word in
defense for the Human race, or our guns to defend our loyal
brothers to the cause of Justice. Death to the bushite, death
to God's enemies who lie cheat and steal from Humanity to
assist in the escape of those responsible for 911.

BASELESS?

/ / Prime Minister Stephen Harper "We will conclude a formal
agreement so that we never again face these baseless
allegations," he said. Thirty Afghan detainees have claimed
they were beaten, whipped, given electric shocks and denied
food once they were transferred to Afghan security forces by
the Canadian military \ \

These demons who war for ZIONIST censorship are a bunch a dope
pushing cop killers, who murder innocent people they call
'Taliban' better known as in Arabic - students.

-

Proudly kill the bushite who would drop from the sky,SEVEN
MILLION landmines on our cities to kill our children for
decades indiscriminately, while offering our Humanity to God no
apologies. Proudly kill the bushite savages all to
desperately survive ourselves creating a better world through
fair, free market communications. To warring for Liberty as
true Freedom wills, is for Justice understood as measured, not
just made up out of nowhere for the pleasures of those truly
Satanic. So spoke the King of being the wisdom we here
revealed by statement of timeless fact. Good will triumph
over evil. That's that.

-

Tenent "Lets everybody tell the truth."

It seems Tenent wants to inform us he actually meant when
saying "slam dunk" - that, selling the war to the American

Joe, without establishing any real facts would be easier than
anything against the powerless as media unrepresented!

-

/ / Rep. Dennis Kucinich, who has called for a withdrawal of
all U.S. contractors from Iraq. "They charge whatever they
want with impunity. There's no accountability as to how many
people they have, as to what their activities are." \ \

Kucinich for President!

-

http://www.stlimc.org/usermedia/audio/11/1_christ_in_court.mp3
http://newmexico.indymedia.org/uploads/2007/04/christ_in_court.mp3
http://melbourne.indymedia.org/uploads/christ_in_court.mp3
http://houston.indymedia.org/uploads/2007/04/christ_in_court.mp3
http://istanbul.indymedia.org/uploads/2007/04/christ_in_court.mp3
http://www.ntimc.org/attachments/apr2007/christ_in_court.mp3
http://english-cyprus.indymedia.org/usermedia/audio/10/christ_in_court.mp3

-

Bushite War LIFE Itself - and - They Couldn't Care Less

'Alpha company patrols the poppy fields.'
20070420_taliban28.mp3 (pbs broadcast)

"About the poppy harvest, currently gathering pace all around
them, they couldn't care less." Instead they kill unarmed
innocent people indiscriminately as enemies to ALL HUMAN LIFE.

They Couldn't Care Less

The 82 Airborne, in assisting in defending the world wide
distribution and production of heroin, tells of murdering
innocent farmers, that would never raise a gun in anger, are
those they openly confess to target for first degree murder as
labeled the, second tier Taliban. That's when not defending
American Pension thiever ENRON'S pipeline managed under their
extremist Muslim fundamentalist regime of intolerance for
public communications, as the continuing thieving of 80
percent the Humanitarian Aid given by Canada to feed the
STARVING, and school our children of the impoverished
Afghanistan, as so reported. Eighty percent. 80. 80 percent
stolen. I'm telling YOU: CBC couldn't care less about what
Canadian soldiers are actually dying as COWARDS for:
"Al-Qaida" = "General Mahmoud Ahmad" = "bush's ungodly
partners in crime" CBC national radio management needs to be
arrested in Canada for high TREASON. Please, be a Patriot,
and demand these zionists allow open communication with the
facts to save the lives of Canadians soldiers they hold in
contempt to die as the bad guys committed to no better good.

Occupation Forces support Afghan Narcotics Trade
http://www.globalresearch.ca/index.php?context=viewArticle&code=20070604&articleId=5514

-

/ / [...] the [New York Times] piece details the torture of [Innocent People] Sunni prisoners at one of the new American-Iraqi "security stations" \ \ Kill the bushite for America, for Justice is Freedom. Lawless mercenaries are not granted by our will to survive truly. A "lawless" enemy granted "immunity" by bushite evil phonies, is that of which, holds ourselves in their confessed contempt for Justice. Receive thanks from everyone, GOD included, by rightly destroying such inexcusable treasonous ungodly enemies of all human life.

Torture is a crime against God and Humanity. So, likewise, joyously, with pride, destroy the neocon traitors of Justice - for the true Love you have as Freedom willed - is as granted. Don't buy their demon lies by blind blanket false assertions, against YOUR Humanity's Innocence in tyrannical bondage, all done in to fool you believing, we have no rights to be heard in our presence - here existing freely. Therefore, to survive US all for something better, halt the 'escaping' murderous bushite thieves for God and America. SOLDIERS: Instead of dying for nothing, my wannabe Patriot Brothers, try joining Liberty's cause, which is our cause truly. Is it because corporate TV zionist money whores, are cowardly and ignorant, as evil hypno muggers, in MY dying for real America, that YOU refuse to speak Now in your Humanity's begging further defense?, on evidence being the only requirement to establish a person's guilt or innocence? for ungodly terrorist activities committed in our name by bushite bombers from the neo-conned AIR FORCE, who, as rotted juveniles, cheeringly bomb us People indiscriminately leaving a Church as something TRULY SATANIC? To dare, in our presence, continue threatening harm against an innocent child of wonder, not yet even born to God's suffering world? Bushites war LIFE itself. So then pleads I again the Son to God, as Man to Men: war to kill the enemy bushite nazi savage thieves, for real Freedom is waged truly by Just causes. The mute, pro-censorship/tyranny THIEVING bushite savaged nation, has NO EXCUSE for the crimes they have committed in our dying names. I demand our voices heard internationally for Justice as Freedom is Godly.

-

Look, these neocon zionists KNOW they are OUR enemies

Israel Knesset member Talab al-Sanai "It took Israel 37 years to develop and perfect these barbaric methods of repression and humiliation," al-Sanai observed. "Surprisingly, the Americans surpassed and outmatched the Israelis in their

[Zionist] savagery in less than two years."

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Look: innocent people are being tortured to death by those
who hide OPENLY in America's uniform. [let US hunt them down
for GOD, despite what demon lies they argue give them as
Satanic to avoid "The Law".]

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http://istanbul.indymedia.org/uploads/2007/02/truth_to_power___the_johnny_wizard_conundrum
.mp3
http://andorra.indymedia.org/uploads/2007/02/truth_to_power___the_johnny_wizard_conundrum.
mp3
http://english-cyprus.indymedia.org/usermedia/audio/5/truth_to_power_=_the_johnny_wizard_c
onundrum.mp3
http://www.indymedia.no/usermedia/audio/5/truth_to_power_=_the_johnny_wizard_conundrum.mp3

War and the Police State: Complicity of the American People
http://www.globalresearch.ca/index.php?context=viewArticle&code=THO20070421&articleId=5454

/ / On September 11, 2001, corporate media and the government
elite launched an aggressive political and media campaign upon
and against the American people. \ \

-

SATANIC AMERICA

/ / After playing a tape of Cheney's statement, Russert asked
Daschle, "Did the vice president call you and urge you not to
investigate the events of Sept. 11?" \ \

911 "truthers" don't want to address the hard evidence like
the clear as day video of steel running like water from the
WTC towers, for, as Humanity witnesses, they'd rather watch
silently, children murdered indiscriminately, before,
acknowledging wise godly men from our communities who speak
ONLY facts on America's derision for real, open market Free
communications - freedom fighters who ACTUALLY defend the
innocent from the neocon bushmob traitors. Each day we hear
of near hundreds of US murdered by the godless Satanic
THEIVING "American" forces in Iraq. without near a peep of
concern by "America". Lawless bushite mercenaries torture
rape and murder, paid to do so by the WILLING American tax
payer, and near 300 million "People" (the NAZIS) can't find
the effort to pick up a princely phone and call the ENEMY pro
child killer George Norry, (who broadcasts every day across
America nationally for the IRRATIONAL neocons,) to air any
real concern for our Lives. True, the demon enemy censors OUR
calls, and contrives WE a buyer without questions, but he
doesn't censor You always forever. So, get to it fukhead,

JOHN is growing angry with americans of EVIL ignoramuses escaping the bushmob for crimes against MY HUMANITY. The Son of Man States: Death to the bushite, death to our MURDEROUS enemies, who lie cheat and steal to assist in the further criminal escape of the ungodly bushmob for 911 as TRAITORS.

Loyal bushie McCain as bona-fide nazi savage "Bomb bomb bomb Iran.."

Reporter 'Mr. McCain, you demon liar nazi fu-ker, don't you think your being insensitive to innocent god loving Iranians?'

Pro-Torture of INNOCENT PEOPLE McCain "Insensitive to what? The Iranians? My response is lighten up and get a life."

Johnny America Lyrics: "Can't an American PROUDLY kill TRAITOR pro-torture Zionist McCain for the Love of living Life Justly, as Freedom was Country?"

Investigating the Investigation
http://www.alternet.org/story.html?StoryID=17816

/ / After playing a tape of Cheney's statement, Russert asked Daschle, "Did the vice president call you and urge you not to investigate the events of Sept. 11?" \ \

PRO-TORTURE Gonzales "I quite frankly don't like the idea of the Judiciary deciding who is on my staff." [at Justice]

PRO-TORTURE Gonzales "I did not make decisions about who should or should not be asked to resign." [in mid-term]

As US State Attorneys?, whom have the most serious of American Justice Department Motions of Defense for REAL Freedom?, he's not concerned directly with?, nor would "like" democratic Peoples to be allowed to care either?. IF he gets HIS way he says - as minding for the criminal master. True, Americans are generally, extremely cowardly as Bush's freely giving PAYERS, led for more ungodly sacrifices in fascistic silence, but this continuing charade of incompetence gathering against our entire Humanity, is going way beyond acceptable to everyone concerning. Johnny Wizard conceivers and otherwise non-believers state together:

The Iraq war against Christ has no true justifiable cause.
Torture is against the law warranting immediate death sentences
The Zionist AIR FORCE bomb people indiscriminately as Satanic
The bushmob stole all the Development Funds for Iraq
The bushmob are stealing ALL of Iraq's oil
The bushmob stole 100s of billions from censored AMERICANS, while George W. Bush personally stole 50 billion from America in the first four months of stealing the initial election.

/ / A BUSHITE GRUNT PRISSING PROUD AS OUR ENEMY "I grabbed her little sister and put her in front of me . . as the bullets

began to fly, the blood sprayed from between her eyes, and
then I laughed maniacally." [, then were heard the cheers of
godless bushite dumfuk traitors obscening to God and Man as
the unholy enemy.]

What ever happened to butterfly kisses after evening prayers?

Are you telling me, an American Father, wouldn't gloriously
kill this lawless bushite enemy and his demonic ilk, for our
love of girls everywhere? Or, how about the UNARRESTED
soldiers we witnessed on video beat shoeless children
pratically to death while laughing and cheering? Or like
those that speak zero defenses for Haditha's confessed MASS
MURDERING irrational women and child killers? The REAL demons
CONFESS to going into a house, WITHOUT reasoned approach, and
slaughtering an entire INNOCENT family.. for nothing but
their lifeless SATANIC pleasures. The 'cause'? "The [mass
murdered unarmed innocent neighbor's] back door was open.."
To, for God, gloriously, with love, kill these unarrested
murderous continuing ungodly bushite nazis, is to war the TRUE
enemies of Humanity to save the lives of our precious loved
ones.

King Johnny Wizard -
President and CEO of
Shareware Earth Co.

-

Bush Won't Turn Over Emails Until White House 'Reviews' Them
http://www.commondreams.org/archive/2007/04/18/596/

It's like a catch 22..

-

So, the demon liar bush tells US, the terrorists would rather
travel to Iraq to kill Americans indiscriminately, than come
directly to America from wherever instead, to kill anyone who
silently supports the indiscriminate murder of our humanity.

CHRIST HATES the godless bushite nazi THIEVES, who by LYING,
murder our loved INNOCENT family members, all to steal our
good names in God. Death to the bushite, death to our enemies.
See the bushite, you kill it for Christ, you kill it for
America, you kill it to defend Yourself.

http://www.indybay.org/uploads/2007/04/16/treason-against-christ.mp3
http://media.indypgh.org/uploads/2007/04/treason-against-christ.mp3
http://houston.indymedia.org/uploads/2007/04/treason-against-christ.mp3
http://newmexico.indymedia.org/uploads/2007/04/treason-against-christ.mp3
http://cleveland.indymedia.org/uploads/2007/04/treason-against-christ.mp3
http://english-cyprus.indymedia.org/usermedia/audio/8/treason-against-christ.mp3

http://neworleans.media.indypgh.org/uploads/2007/04/treason-against-christ.mp3
http://www.ntimc.org/attachments/apr2007/treasonagainstchrist.mp3

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/ / RENOWNED metallurgist Rosie O'Donnell proclaimed on TV on
Thursday that Sept. 11, 2001, was a more significant date
than most of us realized. It was, in her words, "the first
time in history that fire has ever melted steel." \ \

http://newmexico.indymedia.org/uploads/2007/04/metal_flowing_like_water_from_wtc_tower.avi
http://www.stlimc.org/usermedia/video/1/metal_flowing_like_water_from_wtc_tower.avi
http://melbourne.indymedia.org/uploads/metal_flowing_like_water_from_wtc_tower.avi
http://houston.indymedia.org/uploads/2007/04/metal_flowing_like_water_from_wtc_tower.av
http://www.stlimc.org/usermedia/video/2/1_metal_flowing_like_water_from_wtc_tower.avi
http://chicago.indymedia.org/usermedia/video/1/metal_flowing_like_water_from_wtc_tower.avi
http://istanbul.indymedia.org/uploads/2007/04/metal_flowing_like_water_from_wtc_tower.avi

http://radio.indymedia.org/uploads/battle_plan_of_christ.mp3
http://istanbul.indymedia.org/uploads/battle_plan_of_christ.mp3
http://houston.indymedia.org/uploads/battle_plan_of_christ.mp3

Not as tyrants have we come, but as liberators
- Adolf Hitler, 1938 -

http://blogcritics.org/archives/2005/09/27/214145.php

/ / Why would [subhuman bushite] guards torture a man they
considered innocent? \ \ Because they are openly enemies to
Christ. I say, kill it for America when you can, God bless.

http://www.foreignaffairs.org/20060301faessay85202/paul-r-pillar/intelligence-policy-and-t
he-war-in-iraq.html

/ / "As the national intelligence officer for the Middle East,
I was in charge of coordinating all of the intelligence
community's assessments regarding Iraq," Pillar writes. "The
first request I received from any administration policy-maker
for any such assessment was not until a year into the war." \ \

Bushite will kill America

/ / At 9:32 he saw and heard a bomb destroy the offices of the
Pentagon auditors. 40 military officers investigating the
missing money were killed. The CTC was destroyed too. You
can read more here:

http://johnmccarthy90066.tripod.com/id206.html \ \

-

"Al-Qaida" = "General Mahmoud Ahmad" = "bush's ungodly partners in
crime"

Please, if you must forsake me in your personal
cowardice and self loathing, don't forsake GOD and America by
not killing with PRIDE, these bushite dumfuks of NATO the
first chances you get. Love liberty as if it were your own,
and kill a lawlessly murderous bushite nazi savage for your
love of anyone included. (You can quote me forever on that.)

Let Johnny speak!

http://dc.indymedia.org/usermedia/audio/2/repuglicon-enemies.mp3
http://pr.indymedia.org/uploads/2007/03/repuglicon-enemies.mp3
http://www.stlimc.org/usermedia/audio/3/1_repuglicon-enemies.mp3
http://maineindymedia.org/usermedia/audio/2/repuglicon-enemies.mp3
http://arkansas.indymedia.org/usermedia/audio/2/repuglicon-enemies.mp3
http://www.binghamtonpmc.org/usermedia/application/2/repuglicon-enemies.mp3

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Do you expect yourself to fail trying?

It's all up to You my friend, it's all up to you.

Onward Christian Soldier.

IDEA: Let's get our show up and running, by allowing open
public investigations To be conducted internationally, with
open line challenges, so we can publicly isolate each and
every bushmobster personally responsible for 911, and then,
all of everything else still left outstanding murdering
ourselves. Whadoyahsay??

-

'We were torturing people for no reason'
http://www.iht.com/articles/2007/03/28/opinion/edmckelvey.php

..but for a bushite's Satanic pleasure,
death to the tyrant thieving bushite sadists,
death to GOD'S ENEMIES who war freedom in America to help escape
Our Mr. bush Jr. for the crimes HE DID with Ahmad on 911

-

http://www.commondreams.org/headlines05/1128-01.htm

Do we have a problem here in any way?

/ / A spokesman for Aegis Defence Services, said: "There is
nothing to indicate that these film clips are in any way
connected to Aegis." \ \

Not now according to CNN, bushite enemy Tim Spicer, and the
Pentagon. This UN-NAMED spokesperson WILL be tried for aiding
the crimes of first degree murder with it's lying racist nazi
filth, who like getting away murdering black guys for fun and
profit in iraq, paid for by A cowardly DYING AMERICA.

AMERICAN

http://rochester.indymedia.org/usermedia/audio/4/1_news-tunes.mp3
http://boston.indymedia.org/usermedia/audio/5/1_News-Tunes.mp3
http://houston.indymedia.org/uploads/2007/01/news-tunes.mp3
http://istanbul.indymedia.org/uploads/2007/01/news-tunes.mp3
http://www.stlimc.org/usermedia/audio/3/news-tunes.mp3
http://baltimore.indymedia.org/usermedia/audio/3/news-tunes.mp3

The Pentagon's Power to Jail Americans Indefinitely
http://www.jonesreport.com/articles/270307_pentagon_power_jail.html

Look, demon enemies of Christ torture innocent people for fun,
paid for by the silent American tax payer. Americans refuses
to bother making a simple phone call to Coast to Coast to
raise some concern. THEY don't. They refuse to hunt bushite
down in their streets for death to defend the innocent held
indefinitely against GOD'S will. Death to the bushite, death
to Johnny's godless, lawless, fascist enemies of FREEDOM.

/ / Never in modern history has country been forced to pay for
its death, torture, and destruction with its own money - its
own oil revenues. A country where thieves are entrusted with
its richness and where murderous gangs are entrusted with its
security. \ \

Look, CNN, CBC, and FOx News know the bushmob did 911, but
will smile while watching your son or daughter sent out to die
CONNED by their demonic hatred for US freely communicated.
How do I know this? I made the effort of making the phone
calls.

"Al-Qaida" = "General Mahmoud Ahmad"

Defend freedom, and the FBI, by demanding Coast to Coast radio
hosts allow free communications, absent their personal
contempt for preserving freedom to be our America. George
Norry WILL kill Your American child for the contempt he truly
holds for our lives here. He says he only supports murdering
Arab children for the neocon, but when your not looking in his
'shadows', he'll kill your child too, don't doubt it for a
second.

"Al-Qaida" = "General Mahmoud Ahmad"

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NATO forces shoot Afghan child, run over another
http://www.turkishpress.com/news.asp?id=168118

-

The "Shock and Awe" Gallery©
http://www.marchforjustice.com/shock&awe.php

/ / "The children seem to be the most openly enthused. They
are getting a chance at a future the likes of which would
never have been possible under the oppressive regime..." \ \

Johnny America "Death to the bushite, death to our enemies."

-

MEDIA MATTERS
Rosie: Was 9/11 inside job to protect Enron?

-

Glenn Beck "A complete lack of knowledge really, you know,
really hasn't stopped me [here at CNN] from pontificating on
any topic before, so here goes."

-

US Attorney's Firing may be [IS] Connected to CIA Corruption Probe
http://www.theolympian.com/101/story/71116.html

/ / On May 11, 2006, Kyle Sampson, then Gonzales' chief of
staff, sent an e-mail to deputy White House counsel William
Kelley, asking Kelley to call to discuss "the real problem we
have right now with Carol Lam [...] \ \

-

pleasure of the president

US Attorneys don't serve "the pleasure of the president", they
serve freedom lovers dedicated to defending America from
willful criminality. But, americans are too stupidly weak to
demand Coast to Coast hosts allow open communications on
America's highest of concerns. Bushite america would rather,
in silence, thieve from God as our Humanity, than serve the
protections of Justice as ourselves.

/ / According to the Islamic understanding of power, the
Mujahideen don't compete for the positions in the leadership. \ \

"Those who negotiate in the name of the Taliban will be
killed," he [the bushite nazi dumfuk 'Taliban' 2nd in command]
said. He did not elaborate.

Hmmm. Allah is all, and negotiating for freedom from naked
bushite tyranny is won EASILY through communicating
understanding. The tribal strategy of Afghan fighters, where
Allah is Oonerroh, seems to be not the only thing missing from
the statements of this "Taliban" RELIGIOUS FUNDEMENTALIST top
top top leader. Only "second" to Omar the Just. (Apparently
an individual this current bushite incantation of "Dadullah"
is totally un-familiar of.) Omar, the Just, whom Dadullah
claims he receives his Top Secret nobody can see'im orders.
In other winds: Bill a bushite for God and America, an all

day long you'll have good faith in a world freeing ourselves of godless dumfuk tyranny implemented by the horribly foolish, as deeply ignorant of Allah, bushite demon liars for the traitor neocon. TRAITORS!

"Those who negotiate in the name of the Taliban will be killed," he [the bushite nazi dumfuk 'Taliban' 2nd in command] said. He did not elaborate.

Allah is all, and negotiating for freedom from naked bushite tyranny is won EASILY through communicating understanding. Omar the Just knew this to say so, as do I. And this is why corporate news professionals forbid me to speak openly without nazi censorship, ON OUR AIR-WAVES, because I am honorable, right, and true as believable. While America's fun guy, zionist George Norry, states to support PUBLICLY, the ungodly murder of innocent Arabic children for nothing but his personal contempt of YOUR DYING LIFE, while further wanting to invite thoughtlessly nuking places on Earth all for his secret hatred of US freely commutating. Typical bushite. Ending with to tell US again 'convincingly', that bin Laden did do 911 as a terror-ist bad guy in G's World!!?! How so? EH? How so? he don't care man, he don't care. He and his family have millions of dollars to sell you out, so why care for your struggle to survive in bushville soldiering? Frankly, George Norry is a total dickhead. True, he has lots of money in America, but he's still a dickhead nevertheless.

Alex Jones and me aren't on the best of speaking terms, but I will state, a desire to address every same challenge he has adroitly addressed as publicly lacking. And when I am addressed 'officially', I will campaign to put US in the space to realize, we are the government, we are the people. We don't need to run to the hills and encamp ourselves away to defend ourselves to the max from the man, we are the man. I'm telling yeh, I know this to be so as the sea is we magically. Equal rights for all in God's name is self evident. Self evident to ME anyway... but well.. who am i?, right - I'll tell you as I have for more than a decade as a living fiction forsaken for lack of anybody anywhere understanding in totality what I am here on Earth as true Son to Man - a 'understandable' timeless stand in for G to gain recognition through as honest broker. [I've been everywhere around forever, and.. blahblah.. I know people really don't care to know of ancient wisdoms, truths that guide the order to the Universe, cause often they think I'm beyond their comprehension as a 'better than', when all power is in equal respect for others as our hurting brothers and sisters suffering with tyranny by our collective willful ignorance on Justice.[God's bestest is Just for every reason being thus]] I am one serious genius by no accident in words you have as much

right to contend for yourself being, if you'd only believe we have some good ideas here to really defend ourselves with.

Please my American friend, help US speak out freely Coast to Coast. So we together can start, on demanding Justice for all, as innocence in serious jeopardy. Dadullah is most likely an individual who holds at least some control over official military functions of NATO in the region. So, we're going to seed loyalties of the rare Patriots in the force to recognize our need to isolate who supports, not talking FREELY for peace easily in Afghanistan without question. No evidence was brought against Laden, therefore, the Taliban were True Patriots, and bushite traitors are pure racist nazi filth ridden, toxic, as being cowardly dishonorable as despicably evil, enemies to us all. Put US in Command.

Question the bushite, question to anyone who mumbles disagreement in the godly fact, that WE, as Humanity, will spend the better part of this next generation, hunting every last war profiteering nazi war criminal down for our real Freedom from their, so errorred "endless" tyranny of big money terror. Lawlessness with be outlawed, and ANY corporate american who mumbles otherwise, as an enemy totalitarianist, the clear ungodly, (as should be criminal,) will be put to challenge by their very own children, or parents, or bleeding dead brothers. Hannity must be tried for death as lying that the holocaust never happened from Iran. DEATH to the demon liar nazi fu-ker I say, DEATH to the demon liar nazi fu-ker.

"Al-Qaida" = "General Mahmoud Ahmad" = "bush's ungodly partners in crime"

Who IS running this bushite nazi liar show, where they, our elite corporate media masters, kill our stupid kids with their flagrant naked monster lies, while refusing all calls for clarity, Johnny America really wants to know. Like immediately. Help us out here some man, don't be evil.

/ / "Those who negotiate in the name of the Taliban will be killed," he said. He did not elaborate. \ \ He's either with the proven cowards of JTF2, or the two or three "CIA" guys secretly hunting bin Laden in caves out there with tens of billions of dollars. SPENT EACH YEAR 'unknowingly'. (No reason why, but, they just can't tell You, as the paying for it really while DYING) Put US in Command.

/ / The Mujahideen aren't students of power and don't compete for power like others do. We are students of truth and work for establishing this truth and for this cause we sacrifice our power \ \

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http://www.godlikeproductions.com/bbs/message.php?messageid=355789

/ / Timothy Griffin, Karl Rove's assistant, the President's pick as US Attorney for the Eastern District of Arkansas. Griffin, according to BBC Television, was the hidden hand behind a scheme to wipe out the voting rights of 70,000 citizens prior to the 2004 election. \ \ Timothy needs to be arrested for high treason, for fixing an election, or instead, what? we'll make him a State US Attorney in bushville?

kill all of them

/ / In his testimony on Wednesday, Pfc. Bradley Mason of Company C said that on May 8, the night before the raid, Colonel Steele told soldiers to ``kill all of them.'' Three other soldiers gave similar testimony. \ \

I would offer rewards for more soldiers to come forward. Why? because there truly is, no honor among thieves. Every bushite soldier in Iraq for the liar neocon is minimum, a purposeless dumfuked cowardly thief. See? if you offer a reward, and they don't take it, their 'fellow' bushite, kill'em for it, right? why take the risk it'll cash in over your worthless life? For, who can trust a lying bushite nazi savage? certainly not a lying bushite nazi savage. In other words: speak against committing war criminal acts of lawless aggression in Iraq for Bush, as CLEARLY un-American, and I'll try to forgive you as human. Or, I guess you'll kill yourselves in mutually muted total contempt for this universal life as actually worth something.

When you see and hear on video, sexually dysfunctional, as sadistically satanic grunt puke pro-bush soldiers moaning, while deliberately killing innocent defenseless Family People running for our dying lives from a holy church, or as just simply anyone standing near the side of the road, then, my friend, you'll begin to understand what evil actually is. And, what needs to be done to seriously save ourselves. Seriously. Justice must be won sooner than later.

Five Star American General Johnny Wizard will train American Soldiers to recognize such demonic behaviors in combat as worthy of immediate frag to defend the lives of truly fellow honorable soldiers. Soldiers ACTually, committed to freedom from godless satanic dumfuk tyranny of the antichrist demon, Mr. evil personified, the UN-ELECTED 911 TERRORIST, George Walker Bush and CO..

/ / "He realized that they had killed these three [innocent] detainees, and in that moment, yes, he decided to help his [ungodly murderously nazi fascist] squad members, [escape Freedom through Law wisely practiced]" Gorecki said. \ \

There is much self evident truth hovering above the realities
of such statements. For the exampled fact, that he did
actually use a weapon against 'his' troops, 'to save them
punishment', says a great deal more than they contend we hear.
Now really, how ''we be dying as godless war criminals for
demon LIAR Bush'' dumb is that? (and how does such an evil
thing steal our military command in an un-defended Johnny's
America? as a dying for bushite tyranny, irrational neocon
war wanker? like holy fu-k..) Remember: evil is real.

The time is now.

Let Johnny Wizard on Coast to Coast everywhere god damn them
man, get US on the PUBLIC radio to make something better of
ourselves by communicating freely. Do it!

Praise Jesus, and pass the ammo forthrightly. I'm a hungry man.

-

US officer "upset" Iraqi suspects taken alive, court hears
http://www.telegraph.co.uk/news/main.jhtml?xml=/news/2007/03/14/wsoldier114.xml

/ / A US military officer sounded "pretty mad and upset" that
a group of soldiers had taken suspected Iraqi insurgents alive
during a raid in which they had been told to kill all military-aged
males, a court was told Tuesday. \ \

Come on now, who wouldn't take great joy in destroying any and
all such ungodly bushite hatred for Humanity in this light of
day, eh? In fact,why don't American Congessmen, who believe
in defending Liberty, campaign JUST that? Why not??? Is it
because they're LIARS?

Like Coast to Coast's fun guy, he ain't taking our screams,
George "pro Arab child Killer" Norry??

Rapists and torturers must not be allowed to rule our pirated
authority through defending the further 'escape' of the
bushmob for 911.

/ / As a result, the Defense Department put up a Web site in
2005 designed to clarify [to the dumfuk bushite demon liars]
that sexual assault is illegal [...] \ \

Rumsfeld, as it was told on Oprah, doesn't want any arrests of
bushite rapists though, so has worked to deny Justice for
female grunts by denying all requests to the 'Pentagon' from
American Police Departments. [and you thought he was fired!]
Why? because, they, the very weakest intellectually of
America's - do what they're told teen kids, ALL don't have
rights anyone in bushite corporate america is willingly strong
enough as a dedicated Leader to speak in demanding defense of,
for innocence.. Why? because they soullessly advocate
continuing bushite war crimes for a stolen dollar. Stuck that

way apparently. Support my rise to speaking publicly for open challenge on the rights and privileges of all concerned parties. Rapists and torturers must not be allowed to rule our pirated authority through defending the further 'escape' of the bushmob for 911. I would like to form a global posse of sleuthers to identify on international open line radio, all guilty INDIVIDUAL parties by evidenced conclusion on our highest of priority issues, and get started with the nothing to hide from anyone global arrests, with PUBLIC court proceedings, done all for our public interest as the refusing to further fall as innocent murder victims.

Let's save some lives, what do you say guys?

Or, are we going to go further with this: George W. Bush: "If the absence of violence is victory, no one will ever win."

YOU

"If the absence of violence is victory, no one will ever win." http://cleveland.indymedia.org/news/2007/03/24652.php

I know, it's seems odd that I am, at the same time, offering answers to any question on the science of God as is pertains to Justice measured, but this is just who I am to be conscious man. So, if we can get over the shock of me being so especially normal, maybe we can then realize, I have some simple good old ideas that transcend through time by rational understanding communicable between any two people. I am not a "miracle worker" to all those I advise to not eat Aspartame because it's a poison that also makes your body crave un-needed carbs, that will likely convert to more unless fat. So, it slowly kills you, while making you fatter than you need be along the dead end journey faithing in "the system". So, why do some do it religiously? Who cares (for now) but to say, our governments are failing US miserably. I spoke personally with one of the head scientists in Canada at "Health Food and Safety", and he told me the scientific analysis done by reputable scientists I found freely available repeatedly on the internet years ago, was completely true. (It breaks down to formaldehyde, and methanol (a slow lethal poison), among other shockers. Poison. P-o-i-s-o-n-s in our food stuffs. Poisons.) However, he could take no action to defend Canadians "officially" because we, Canadians, have our corporate interest news departments completely refusing to defend ourselves from corporate exploitation anywhere, and as natural consequence, we, as the dying world, would together unrepresented, probably lose a law suit from mutant Monsanto through the self inflicted bounds of OUR censored WTO program. - instituted through the top secretly mastered puppet people persons of the 'unseen' NWO I guess.

I'm telling you, we need me as King.

Look: Aegis's workforce, for American PAYING profit, has been publicly disclosed through CNN to be shooting people in Iraq indiscriminately for your money, and when the Pentagon was contacted by Nick Roberts about what would be done, they responded, nothing would be done by Johnny's America but to increase the multi-hundred-million dollar contract with demon enemy Tim Spicer to continue. Now... why you ask? Because the neocon liars, steal money by lying to cowardly American kids about what they mindlessly, without thought, give their souls for. Tim Spicer openly hires South African goons to commit hardships for American GIs to die without end for, in lawless tyranny. Peace sells less money for the neocon war profiteers to murder the innocent American as. (Iraqis, along with the rest of Humanity's Men, WILL eventually learn this truth, or life for you will end.) As an Arab hating bushite, (like what you'd find as a publicly proud practiced hatred for all Humanity, by an Amerkan dumfuk soldier in Google's alt.religion.islam), they say nothing for Freedom by Justice, but root themselves to Spicer's monsters who like killing black guys, as world renown mass murdering racist nazi filth. That's why zionist Israel loves them so much.

Look: Somebody stole four trillion dollars out of the Pentagon.

Look: Greenspan STOLE four trillion American dollars for his international billionaire banker friends before 'leaving'. [Asian market chaos SCAM]

Look: Lotteries everywhere in North America are running the same PROVEN criminal scams that cost US ALL billions and billions of public dollars that, without question, (as MATHEMATICAL FACT), regressively destroy our dying communities. CRIMINAL. [Solution: 100 percent cash payouts.]

Look: corporate magic TV people couldn't care less for US if they tried. Ahmad funded Atta. bin Laden claimed he played no part in 911. And video of iron running like water moments before the first tower fell is freely available for download all over the place. CBC, CNN, FOXnews et al. know the Bushmob did 911 in other words. I've spoken to most of those 'in control', and I'm telling you, they're losers, and they know it. Remember: they'll censor my voice to send YOUR child to die for no better good, or reason understood, while entertaining. Weekend TV in North America totally sucks. Now, why do YOU think that is brother? The more powerless they make US, the more money the neocon zionists can murder Humanity for, thinking they might just get away from this if we continue to take no action in defense of anyone as God would will. Let me be Your servant King, by backing me up some here. We need some dollars to eat, and I need it now before we starve to deaths.

Look: Barbra Bodine did the Cole bombing. [the Cole whose crew has been completely overhauled. Where are the many who served there NOW eh?]

Look: America has kidnapped countless thousands without evidence to be held against OUR will indefinitely. [Like the NOT Jewish Israel]

Look: innocent people are being tortured to death by those who hide OPENLY in America's uniform. [let US hunt them down for GOD, despite what demon lies they argue give them as Satanic to avoid "The Law".]

Look: the bushmob war profiteers STOLE the Iraqi Development fund

Look: the more than 100,000 security contractors for Bush are officially deemed lawlessly unaccountable to anyone - THINK ABOUT IT

Look: Negroponte PERSONALLY stole the Iraqi emergency water provision money

Look: Sattler OPENLY committed the worst war crimes of all Humanity's history

Look: I am a guy that is regularly denied public access to our national radio programs because I speak documented truths consistently on behalf of real honorable soldiers and police officers. I agree with most, if not all facts Alex Jones importantly brings to our attention, however, I almost as often, disagree with his conclusions.

Support my cause, which is your cause.

King Johnny Wizard
President and CEO

-

Senior Military analyst, Rob Riggle "In the field John, the soldiers are out there, every day, risking their lives, for a common Ideal: that none of the President's decisions be questioned."

This is more true than a bushite would admit before murdering a honorable father to rape his young child, like Lcpl Boudreaux freely confesses. Boudreaux will tell you, openly, you have to murder the Arab father of the Arab child your planning to rape, because if you don't, that Father will spend the rest of this life, hunting you down in the streets to rip you limb from limb for it.

Let US, me and the few, proud, and the brave, bring that Father's intent to bare on lancing Boudreaux, and any other who would sing in it's ungodly defense.

Zionist american media celebs do tell, everyday, soldiers for the neocon are all Heroes. (True Hero worship has long gone

dead, and simple common respect for the starving man of Johnny Wizard is almost entirely illusionary, but for the love of God has for me, the Son, to never stop caring religiously.) While McCainites advocate imprisoning any (chosen) man in America (with our familiar "Exploitation Units"), who has a picture anywhere on their computer of a fully clothed teen, while denying this following censored video of children being beat to death for fun and profit is real. When I watch only thirty seconds, my rage as a god increases beyond anything anyone of Humanity can even contemplate, and i start crushing bricks in my hands with fury, twist iron bars into pretzels, all as a foolishly feeble attempt to personally have killed those present in this video. Then I cry. I cried for these children present in this video the first time I watched it, and I cried last night briefly, before stopping it.

Please, my brothers, join me in hunting each and every bushite present in this video down for death. For a Love of God that will never end, until we have seen each and every responsible child killing bushite present brought to true Justice extreme.

/ / British Soldiers beat unarmed Children
watch?v=l2zZkbhc77M>
.
Even after they plead them to stop they continue and
the cameraman seems to be having an orgasm.

news_of_the_world_uk_iraqi_beating_video.wmv \ \

Did you know Blair had arrested the reporters who reported this initially? Didn't think of defending children, no sir. For, the commentator, who gives the play by play, while masturbating, has been given forgivence because it's an heroic "Christian". Not publicly executed. This must change for the better. Here is where I will make my final stand, and where heaven shall part from hell in America.

9/11 WTC Molten Metal
http://www.youtube.com/watch?v=VW-HE6rGDHI

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Men pick military as sentence
http://www.centredaily.com/118/story/29432.html

Great, more criminal heros to victimize Humanity for.

-

ARE YOU TALKING TO ME?

George W. Bush:

"If the absence of violence is victory, no one will ever win."

But for those of us who would believe protection to be a heavenly good thing actually he means? What the. does he mean?? Find out!, in the new candid, let's talk politics interview, with no other than, PRESIDENT GEORGE W. BUSH. (talk about having connections!) Have your mind blown on his TRUE wisdom, seldom since ever, so wisely articulated in a more private setting, than this: The Story of the Millennium.

http://cleveland.indymedia.org/uploads/2007/03/question_period_with_gw.mp3
http://dc.indymedia.org/usermedia/audio/6/question_period_with_gw.mp3
http://richmond.indymedia.org/usermedia/audio/6/question_period_with_gw.mp3
http://houston.indymedia.org/uploads/2007/03/question_period_with_gw.mp3
http://arkansas.indymedia.org/usermedia/audio/6/question_period_with_gw.mp3
http://pr.indymedia.org/uploads/2007/03/question_period_with_gw.mp3
http://media.indypgh.org/uploads/2007/03/question_period_with_gw.mp3
http://imctj.espora.org/uploads/2007/03/question_period_with_gw.mp3

ARE YOU TALKING TO ME? - A Johnny America Exclusive! - a candid interview on Bush's deeper than ever political thoughts about the war, up front, and personal. Surely, an historical event such as this, with the revelations contained in his own shockingly powerful words, while granting a stage in Johnny Wizard's World, is frankly, beyond the pale, quite shocking in perspective I'm sure I would state again. I feel confident Bush's surprising candor on life's humbling higher meaning wont make the crazies 'out there' any more less right per say. As for the barely living of you passing travelers to our dying Realm.... be ready to be taken on a journey of such profound discovery, with a wit never before witnessed from President Bush!, all about the cruel hardships Americans continue to endure without guidance through effective leadership. Without evidence to form his guilty verdicts. That orders the murder of the innocent with. I kid you NOT. Hey? maybe the Son of Man doesn't have to wipe out the entire human race after all.. With Bush co-operating now, I personally believe, no, I know, we're going to make a go of this after all.

Let US speak in challenge to any or all bushite enemies

NATO war plane bombers must be hunted down by the will of Humanity to be gloriously publicly executed to defend the innocent lives, they once again, have indiscriminately murdered in Afghanistan without a sliver of evidence, but for to say, some dumfuk had a 'rumor' that a single individual SUSPECTED to be an anti-heroin pro-child defending Taliban supporter, granted the bombers of NATO to wipe out an entire village MURDERED indiscriminately by the TRUE demonic enemies of LIFE. Please, if you must forsake me in your personal cowardice and self loathing, don't forsake GOD and America by not killing with PRIDE, these bushite dumfuks of NATO the first chances you get. Love liberty as if it were your own, and kill a lawlessly murderous bushite nazi savage for your

love of anyone included. (You can quote me forever on that.)

Giuliani told ABC's Peter Jennings on September 11, 2001

'..and I was operating in there [75 Barkley St.], when I was told that the World Trade Center Towers were going to collapse.'

WTC TOWERS? "WERE"?

Did you know that the international Johnny Wizard comic book is out there? Don't miss out on picking up a copy for yourself, or your loved ones. And did you know, I'm trying to get on international radio without a censor to thunder my audience back into submission. I HATE HANNITY. All I want is free open debate to resolve this crisis, that doesn't have to be so ruining our dying worlds without questions forwarded by the dumfuks. Justice is Paramount through reason to be so. The Bush Administration have been up to no good, escaping for 911, that New York City should sue for. Hire me on as legal consultant buddies, cause I'm like near starving broke here, with supreme court challenges failing my cost factor, and hunger pangs slowing our progress on fighting unjust incarceration. I desperately need money, like now, as a gift, or an advance on a industry paid private consultant gig. Or, instead, maybe you'll idly watch some innocent person willfully be sent to prison by liars in your demonized name, to defend the ungodly evils of war criminal traitor, our Mr. Bush Jr. in foolish disguises. Your call Bud.

be Wiser,

Johnny Wizard - Patriot Liberator of Eternal Destiny
(i.e. REAL sustainability as self sufficiency)

(i.e. nothing is separate from existence ourselves, not even time, and Justice is binding to defend our lives if practiced fairly with it's elemental divisions through reason. Example: a person accused of a criminal offence, without any evidence, is INNOCENT. Those who say otherwise, are the actual terror-ists. Civilization's ancient Founder Hammurabi, suggested just to openly publicly have executed those who lay capital allegations without any evidence, while working to close outstanding criminal investigations. A made CRIME within ourselves Hammurabi claimed, and by thinking such ways, brought birth of 'Civilized' to an untamed till then, chaotic confusion. Old becomes again anew, because Americans are weak as polluted, and too cowardly to defend the rights of US innocent. Let's change that. Support my climb to international controversy, with my unchallenged claims of direct accountability being sought, for the 911's neocon war terror plot.

'A military judge ruled last week that Watada cannot base his defense on the war's legality.'

Telling US what?, that it is a crime to not commit a crime? It isn't only high treason against America the ungodly bushite are guilty of, but of a madness held by those truly Satanic..

/ / 'Why are you taking pictures? You don't have permission."' [...] the [bush whore] American, speaking through a translator, warned him that he did not want to see any AP photos published anywhere.\ \

No bushite was found gloriously killed for country, yet, they, the godless bushite enemy, continued to shoot innocent People indiscriminately for a distance of six miles, while likely, secretly masturbating each other as bushite liars do always.

The pro-bush irrational military said only eight innocent un-armed Afghans were counted as murdered deliberately, by those who believe our Mankind, can not ever find themselves accountable, without zionist controlled, corporate news permission. See? The military counts mankind as zionist, but I am a man of real men, committed to defend our world from all enemies, foreign, or domestic. Unlike a bushite traitor to God and America, who's word, as Oath, means as much to them, as we do. Ungodly as they are loveless, the bushite, is Life's enemy.

See my friends, this is why I, as the Son of Man beg and plead for all able bodied men, to kill treasonous bushite on sight, for every time you love God by defending the innocent from murder, (the innocent whom any pro-bush corporate professional hold in total self contempt,) you save REAL peoples lives, and you defend God's good name to love God as ourselves committed to true Liberty. Bushites are enemies of freedom, enemies of God, and worthy of death, before allowed to further bomb people indiscriminately like the commanders of NATO order day after day without risking instant frag because, bushites are blind cowardly thieving nazi fascist savages, brain damaged, who believe as satanic demon whores of Molech, they can con all of US including me forever, just like dare dubya. Dumfuks.

God is Great!

-

WHERE IS YOUR NATIONAL NEWS TO DEFEND OUR PRIVATE INTERESTS?

Former FBI Director Calls For New OKC Bombing Investigation

/ / The FBI man in charge of collecting evidence from the government building destroyed by the Oklahoma bomb has called for the case to be reopened. \ \

WHERE IS YOUR NATIONAL NEWS TO DEFEND OUR PRIVATE INTERESTS?

First things first: America must demand the immediate arrest of those who told America the victim committed suicide, when clearly, due to autopsy photos, the individual was tortured to death as the innocent. So, the 'officers' responsible for the fraudulent claims, need to be arrested for accessories to MURDER. The torture will earn them both the death sentence, if found guilty under STANDING AMERICAN LAW. And any bushite like a, it's always a great day George Norry, who purposefully with criminal intent stands in life's continuing way for Justice's demand, American Patriots will phone to Bill with every once of pinky power we have at our disposal.

Support Johnny Wizard's personal challenge against thieving LIAR traitor Hannity, and his corporate nazi bush whores who lore our stolen values by how much they can deny US privilege. Coast to Coast radio hosts need to be publicly challenged for debate they deny US knowing of together naturally speaking. Great example of our Problem: CBC National Radio, in Canada. When a caller phones during the very rare moments we're taking public words, have a pre-broadcast rig-a-ma-role question session, you'll have with not only the OFF-AIR screener, where he'll probe you for controversy, but after the first process of noting in book form your disclosed intel, will notify you that; IF your independent thought is granted by the "Producer" (- who reviews everyone - rules are rules -) Our national station will phone you back this afternoon, so stay tooned, to line you up with your baking gingerbread creds. They never ever dido! The more Brilliant you are, (like the highly charged as extremely charismatically charming, wild man ruler, Johnny America - the media phenomenoner) the higher probability they'll find POSSIBLE concern, on their do nothing for your taxed attitudes..!. Why take chances someone might show a greater living responsibility to a real suffering God as our left corporately forsaken Country?.?.?. A dying Humanity.

Look, seriously, my friends, we have all the answers to our problems.

Support Johnny Wizard's personal challenge against thieving LIAR traitor Hannity, and his corporate nazi bush whores who lore our stolen values by how much they can deny US privilege of equal standing.

Get it done brother.

-

/ / Corporate TV News people are part of a death cult that doesn't rely US on evidence for proof they say we believe them unbiasedly without question. While forbidding ourselves to hear OUR calls for real Justice. \ \

-

Help me gain access to speak freely for open challenge against Hannity, and of America's Coast to Coast Radio network hosts, who deliberately deny you to contend, we're really, one hell of a great bunch of People persons with rights God damn them.

Let's do this.

-

http://xml.nfowars.net/Alex.rss

Use this address in Firefox to get daily News podcast of Alex Jones.

/ / If you don't have an instinct, to stand up for women and children, your not a man. That's what men are supposed to do, it's not anything *special*. I'm nothing special. \ \

-

/ / KBR's Tiger Team stayed at the five-star Kuwait Kempinski Hotel, where its members ran up a bill of more than $1 million. This outraged the army, whose troops were sleeping in tents at a cost of $1.39 a day. The army asked the Tiger Team to move into tents. It refused. \ \

See? KBR is now privately running hospital care for the dumfuk grunts, so, what would you expect but rat infestations? Oh, you never truly thought... what being a "Liberal" or "Conservative" victim is. Are you pro Liberty, or pro tyranny is the question riddled really.

-

"For every fatal shooting, there were roughly three non-fatal shootings. And, folks, this is unacceptable in America. It's just unacceptable. And we're going to do something about it."

- President George W. Bush

Kill a bushite and God will love you for defending US, the innocent in war time.

GOD PLEADS: KILL the lawlessly thieving demonic bushite ENEMY of Life.

http://mediamatters.org/items/200702260008

/ / Wash. Post parroted White House claim that Iraq war was authorized by U.N. Security Council \ \

Seriously, the propagandists responsible, need to REALLY, be put to death after found out through US public court proceeding. NO ONE would disagree that Iraq is a war crime, where more than a MILLION INNOCENT PEOPLE have been raped, tortured, or murdered by dumfuk bushite grunts. If YOU actually think about it, all of everyone would gladly kill an unholy bushite terrorist, before allowing it to murder

families running for our lives as loving Church goers.

-

/ / · Clandestine operations against Iran and Syria, as well as the Hizbullah movement in Lebanon - even to the extent of bolstering Sunni extremist groups that are sympathetic to al-Qaida \ \

Look dummies, by Bush funding bin Laden forces, he is undermining the troops to DIE. Lawless American can not be allowed to accept this from the actual demon anti-Christ, can it?

-

Death to our Enemies

My friends, People are dying because the, Israel=Jew, magic radio and TV crews, wont broadcast THE TRUTHS of our publicly available findings. Police findings. People are dying needlessly, illegally, irrationally like meaning really stupidly on Bush's behalf, for they claim, we don't want to be 'embarrassing ourselves' with MY wisdom, You people seem to not be there for God when the chips are way down, and truth is plain to see.. 911 was an inside job, and CBC with CNN don't want to tell us about it, but will watch our LOVED children lied to, to go out and die further for a causeless war of criminality unparalleled in it's wickedness.

http://arkansas.indymedia.org/usermedia/audio/4/us-vs-them.mp3
http://austin.indymedia.org/usermedia/audio/4/us-vs-them.mp3
http://chicago.indymedia.org/usermedia/audio/4/us-vs-them.mp3
http://dc.indymedia.org/usermedia/audio/4/us-vs-them.mp3
http://houston.indymedia.org/uploads/2007/01/us-vs-them.mp3
http://maineindymedia.org/usermedia/audio/4/us-vs-them.mp3

Support my calls for open communications on "America's" Coast to Coast radio network, to accept any open challenges for those who disagree that America demands Justice for Ourselves above the intent of the censoring bushite criminals.

http://obiakpere.blogspot.com/2007/01/secret-origins-of-aids.html

/ / The [MERCK] experiment was followed by similar hepatitis B experiments using gay men in Los Angeles, San Francisco,

Chicago, Denver and St. Louis, beginning in March 1980 and ending in October 1981, the same year the epidemic became official. [...] By 1984 (the end of the study period) over 40% of the men tested positive for HIV. [...] One fact is obvious: There was no AIDS in America until the exact year the [MERCK] government began experimenting with gay men. \ \

http://dawsonink.vox.com/explore/family/tags/vaccine+safety/

/ / Fact 1: \ \

/ / The average age of diagnosis for cervical cancer is 48
years old. But they propose to give this vaccine to
11-year-old girls. Not even Merck says the vaccine will last
nearly that long. Merck says they don't know how long the
vaccine will last. \ \

-

Nichols Fingers FBI Agent Directing McVeigh in OKC Bombing By Name
http://aftermathnews.wordpress.com/2007/02/23/nichols-fingers-fbi-agent-directing-mcveigh-in-okc-bombing-by-name/

-

Bush Contaminating our Drinking Water
http://blog.myspace.com/blissblood

/ / Leaks in underground storage tanks can contaminate water
supplies used by nearly half of all Americans, and the GAO
reports there are some 117,000 known leaks across the nation. \ \

-

Don't let these neocon zionist bastards do this to US.

Bushwhore Tony Snow "[...]We know[...]"

General Pace "[..]WE DON'T HAVE PROOF[...]"

Senator Hagel "..we're decimating our National Guard."

Again, commander Blount, a Saudi, from the third infantry,
gave out 170 TONS of plastic explosives from Qaqaa to kill
Marines with. And, "American Patriots" don't rightly bill the
true demon nazi fuker for it. Again, Blount, a Saudi,
confesses to ordering SOULLESS bushite soldiers to murder
People indiscriminately for profit, all so to let US know he
is there still laughing with our stolen billions. Bill the
bushite Bush bitch Blount, a Satanic demon ENEMY for it.. why
don't you? as the snookered to sacrifice your loved Family
Guy, American Dad? Corporate TV News people are part of a
death cult that doesn't rely US on evidence for proof they say
we believe them unbiasedly without question. While forbidding
ourselves to hear OUR calls for real Justice.

Get it done.

-

http://www.crooksandliars.com/Media/Download/14453/1/Greenwald-Colmes-Gaffney1.mp3
http://www.crooksandliars.com/Media/Download/14453/1/Greenwald-Colmes-Gaffney2.mp3
http://www.crooksandliars.com/Media/Download/14453/1/Greenwald-Colmes-Gaffney3.mp3

promoted through the tyranny of censorship

Corporate News America's Terror Expert, Gaffney, who publicly advocates the rape and murder of the innocent in Iraq to thieve from for the 'escaping' neocons, (as the truly UNGODLY,) stated these words about why American Soldiers continue to lawlessly DIE sacrificed for no better good or reason understood, as total willing dumfuks under deep hypnosis:

"It is not George Bush, it is not the Neocons"

"," = swinging pocket watch

Don't let these neocon zionist bastards doe this to US. Either Gaffney suffers from some blind dolt syndrome, where he clearly can't see himself flailing madly in criminal ignorance, or he's an accomplis of blatant treachery, to help escape his demonic war profiteering benefactors who murdered thousands of Americans for similar gains through the unspeakable bonanza of the "Pearle Harbor" like event that 911 was. What the peenackers publicly stressed they would crave to fool US into Iraq and beyond as glorified war criminals. 911, New York City, where thousands of Americans were murdered, and millions polluted. killed like now American teen soldiers with the Iraqis. Led by a Sattler, or Mattis, Blount or Russell, who order the murder of women and children openly, and 'they', the actual soulless minions of the demon antichrist, the true dumfuk cowardly enemies of Humanity, don't cut them down instantly instead for Life as cherished. That must change for our betterments. Kill any bushite bomber and be loved by God's America.

Any Commander that doesn't support the arrest of those responsible for 911 and the subseqent neocon war crimes of Iraq, is a traitor to God and Country.

How much much God take as taken, before you people get on over this criminally empowered war monger Congress of an unelected lawless dictator demon, and call them out on the turning talk commercial radios, all to finally truly defend ourselves with a good media plan for results.

Make the call, be a man.

-

Sir Ken, head of the Crown Prosecution Service

"The fight against terrorism on the streets of [..] is not a war. It is the prevention of crime, the enforcement of our laws and the winning of justice for those damaged by their infringement."

You got that right. So, join US in demanding the quick trials, and public executions of known bushite enemies who murdered Americans on 911 with general Ahmad, and who with Peter Powers, murdered the innocent in Britain for more stolen goods against God. And anyone in the air force as bushite bombers should be a great joy for US all to hunt for prosecuting too. The bushite dumfuk is an enemy to our lives, with it's blatant naked contempt for the innocent, who like the demon liar THEIVES at CJOB, George Norry, or Hannity, will forbid ANY human defenses of the lawless dictate of the IRRATIONAL tyrannical demon antichrist, all so to victimize more of You as the censored forsaken.

REPENT. [from the Greek, meaning to think.]

The TRUE Son of Man Johnny Wizard Exists Born to this Eternal World to end permanently demonic bushite enemies of Creation. Help Life out by destroying cowardly America's greatest threat to the Species, the greatest threat against Humanity's Freedom to be Loved by God. Corporate nazi zionist bushlores at CBC, CNN, and criminal thieving from the desperately poor in Winnipeg CJOBers forbid open communications, and I can't 'take over', because then I'd be defeating my own, power to the Peoples argument. So, it really is up to YOU, yes you there... reader. Who.. really..? YOU, here, now. Life begs, takes a stand for your fellow man, and demand our voices heard for the defense of the entire human race. And be quick about it. Repuglicons don't want freedom from endless war where they kill your forsaken kids, for we all know, bushites would be publicly tried, then spend the rest of their treasonous lives behind bars broke, or dead from lethal injections made popular in America. Again, officer Bowman is responsible for letting 'escape' those from Fort Detrick, who attempted to murder the American Congressmen who thought going into lawless tyranny, !makes no sense! Where is corporate America on our issues when OUR free speech is ruled by the irrational evil minds of Limbaugh, Bell, and Norry?!?!! Back to Bowman: Bowman, also is responsible for sabotaging the Moussaoui warrant. And, how much you wanna bet, he's probably the same bushite who found Atta's passport, and likely had all 19 names of the high-jackers to give CNN, CBC, and FoxNews just like the neocon's "bin Laden" would have too. Take the publicly prancing bushite enemy out for questions by yourself, if he doesn't plead his defense publicly on Coast to Coast by tomorrow. Remember, there ain't an "Intelligence" group worth their salt on the face of our Earth, that doesn't know exactly what I'm doing here honorably for a real Justice made through careful thought. So, support Johnny Wizard speaking for public challenges internationally, and with the 23 plus co-operating for life 'Intel' agencies, along with, anyone else who can join in on the call. as a growing number of Patriot Soldiers, who trust yourself to see, this wanting of

Justice isn't complicated. A person accused of a terrorist event without any evidence, has our accuser a bushite, who should be watched carefully until verifiable conclusions are done by the understanding of fact. Not faith. With George W. Bush making real decisions in faith, expecting us to believe as corporately broadcasted unabashedly unbiased, that he is not a deliberate incompetent monster war criminal of unfathomable evil?, who is just too 'stupid' to understand why we are innocent until proven otherwise?, is really something we all need to scream about to save our dying lives.

"[..] just like the neocon's "bin Laden" would have too."

However, the real Laden, on video taped confession, claimed he played no part whatsoever in 911, then later, offered himself for arrest, confident he would be acquitted. Not corporately newsworthy though, so, few even know why their American child was later died in the terrorists act of corporate contempt for US living Freedom with something greater as real Justice wills

Yours again,

King Johnny Wizard

-

CONTACT

/ / IDEA: Let's get our show up and running, by allowing open public investigations To be conducted internationally, with open line challenges, so we can publicly isolate each and every bushmobster personally responsible for 911, and then, all of everything else still left outstanding murdering ourselves. Whatdoyahsay?? \ \

Art Bell, the zionist enemy of Life, wont allow free communications with the established facts though,

What do you think? Are you truly all alone on this?

Again, more than half of the money being spent on demon Bush's wars against life's reason for being, is completely left un-accounted for thieving. Not spent to offer dumfuk cowardly soldiers help hunt to kill bushite rapists and torturers. Stolen American values Just like the bushite soldier on the ground, who after gunning down innocent people in the street, go through our pockets to steal the spared change. Kill a bushite for the love of God why don't you my American Patriot brother and sisters?, today!

Again, my friends, Art Bell and George Norry have thousands of bushite dumfuk in America that will phone them to tell US how greatly they are to have no care for dying freedoms in America. While when the humans call, Art Bell for example,

between breaks, when privately screening his calls, just hangs up on anyone he fears might articulate things like Ahmad funded 911's Atta, according to the FBI, in defense of America. I say, we at LEAST, talk about putting them both to death for treasons against Your Life dying teen soldier, wannabe Patriot. Make sense?

Again, corporate nazi america states 30 percent of America supports the ungodly George W. Bush's demon antichrist action, when in truth, it's less than one in a thousand. it's just CBC, CNN, CJOB, and Art Bell the liars ain't taking our calls for enlightenment. just like they treat the innocent in Palestine for zionism's encouraged racist in-action. For what does a fan of 'we're the best' Coast to Coast radio network family know about nothing after we witness them froth at the thoughts of nuking countries, or calling for enemies, none of us here in North America have any real problems with?

People of Earth, know, these bushite soldiers war Creation proudly with repeatedly committing aggravated felons, and South African death squad goons, all to war Love for the neocon god haters. Who, as peenacking atheists, as their very own documents stress, would murder anyone of US for a stolen nickel.

Unhinged and unfit for office
http://www.dailykos.com/storyonly/2007/2/15/105017/202

-

Protestor's sign:
"killing innocent people is the problem not the solution."

-

google-video-of-thermated-metal--flowing-like-water-from-the-wtc-towers.avi

http://english-cyprus.indymedia.org/usermedia/video/7/google-video-of-thermated-metal--flowing-like-water-from-the-wtc-towers.avi
http://www.indymedia.no/usermedia/video/7/google-video-of-thermated-metal--flowing-like-water-from-the-wtc-towers.avi

-

http://www.ergogenics.org/248.html

/ / A Winnipeg bodybuilder, who had to be forcibly removed from a flight to Winnipeg, was denied bail in a Minneapolis court Friday and will remain in jail until his trial. \ \

(snpd)

My friends, People are dying because the magic radio and TV
wont broadcast our publicly available findings. Police
findings. People are dying needlessly, illegally,
irrationally like meaning really stupidly on Bush's behalf,
for they claim, we don't want to be 'embarrassing ourselves',
leaving our forsaken Johnny Wizard's Wild Wow World of Wonder
Wording Wees!.. mostly just appreciated by myself as sole
surprised spectator, because you people seem to not be there
for God when the chips are down, and truth is plain to see..
911 was an inside job, and CBC with CNN don't want to tell us
about it, but will watch our LOVED children lied to, to go out
and die further for a causeless war of criminality
unparalleled in it's wickedness.

Do you expect yourself to fail trying?

It's all up to You my friend, it's all up to you.

Onward Christian Soldier.

-

THE "IRANIAN" 81MM MORTAR WEB PAGE IS A FAKE!

/ /the traceroute traces the IP not to a business, but
to a university! \ \

-

Wuterich "shoot first and ask questions later"

Wuterich "shoot [defenseless innocent women and children]
first and ask questions [from the corporate zionist pro-kill
anyone for a stolen nickel propagandists like demon enemy
AIPAC Hannity, George Norry, or, censors his calls for neocon
war criminals traitor Art Bell] later"

http://www.globalpolicy.org/security/issues/iraq/occupation/report/atrocities.htm

/ / commanders may give orders to ``shoot first and ask
questions later.'' \ \

This is why the Son of Man through God begs the Peoples of
Humanity to kill on sight, the enemy bushite betrayers to
Life. Ourselves, the innocent. These soulless grunts don't
destroy such deserving commanders, Like Blount, Sattler,
Russell, Wuterich, Pantano or even Kimmitt, and instead, as in
Fallujah, murder every woman and child present, while stealing
all our given monies for desperate life saving help. Anyone
in the Air Force deserves to be justly put down, for, I've
NEVER seen any legitimate bombing campaign, but for to kill
People indiscriminately like NATO regularly does with
radio-active toxic waste, while then sending in the dumfuk
Marines, or the 'from the coast' Canadians, who of course,
rightly get killed on the ground in retaliation for such blind

evil stupidity. Please, I beg, help Iraqis, and kill the bushite thieves to defend our forsaken God. American children, help me my loves. Please don't allow the bushmob to escape for the treasons against America on 911, for, bushites are OPENLY traitors, as the TRUE enemies of evidenced Justice, as the Freedom to do our own things loving God on our own. Besides, most bushites aren't even registered American citizens. Bushites need to be hunted down for destruction - by the Loyal Christian American Patriot Soldier, the ones who war to win against those who torture US innocent to death as the ungodly Satanic LIAR enemies. Save the Humans, kill a bushite false accusing traitor of American Freedom To-day, and become a real Man in the presence of Johnny America, an actual Man of Men, Lord of Lords, and King of Kings.

McCain is insane
http://www.codemonkeyramblings.com/2007/02/they_say_that_insanity_is.php

Alert the USER! not tyrannical leaderless dumfuk thievers, for it is the expresser who, if any, that is guilty of a determined illegal expression. In 'The' Canadian case, they, (once proud IRRATIONAL bushiter THEIVES [pro Afghan child killers determined to help the ungodly demon Bush's 'escape' for 911]), want/HAVE to put MEN is prison for beautiful pictures of girls in panties, or bubble bathtubs being. IT IS demonization. Leaving twenty year olds to look like they could be tens in a singled out of context womanly derriere, that our Jurys nations-wide, are generally, denied to perceive normally, if at all. McCain knows he is an enemy to God's children everywhere. McCain speaks NOTHING to demand the execution of hiding as 'British' soldiers who on prized video tape, beat to death young barefoot children for erotic fun, nor on mercury vaccines not banned minus "The President" in name. BANNED.

Sorry everybody, but that's the way it's gotta be for my Life to have meaning terms.] Long story short: Females Rule, and wiseguy Johnny is Freedom King for this moment Being.

Please help God.

We have to overhaul how all our national news Podcasts are assimilated through corporate nazi zionist censorship. Art Bell and George Norry are enemies to ALL american teen troops put in harms way to die as bad guy irrationally for the neocon God betrayers. Why? because they purposefully lie to have YOU die as innocent murder victim. Death to the bushite, death to God's enemies.

Be a friend if not an enemy,
Your buddy,

King Johnny

-

How is a Zionist Jewish?, I, the King of the Jews Messiah ask my fellow brothers and sisters everywhere. How? FOUR million land mines in Lebanon a godly act is it? Jew only roads not Aparthied, nor stealing a Christian's Home I suppose..? How?

An Oath Every Soldier Swears To God With

/ / she told The Nation. "If I contribute to the Army's prosecution of Lieutenant Watada on speech-related charges, I will have colluded in suppression of speech. What could be more hostile to the ideas of a free press than that?" \ \

Again a Patriot Soldier whose only crime is that he refuses to commit a crime in Your name. Do something about it. You defend this Patriot American Citizen as if Your America depends upon it. The "Judge" who publicly forbids to hear Watada's freedom defense, an Oath every Soldier swears to God with, is a "Judge" who needs to be privately arrested for treason against YOURSELF. Support my call to demand our voices heard for Just causes, or go die silently to the grave prisonized in a military dictatorship your 'neighbor' will say quietly of, (under his bushite breath,) good riddance to caring where my pusher's overdue payment goes to??. who the kcuf are you?? ... Eiiiaaahh! Jesus kills bushite for breakfast.

- On yet another, praise be with US, Alex Jones News Podcast -

Bob Watada: "He did his own research, and he found that there was not only deception, but clearly lying by the commander. Now if YOUR boss lied to you, and put YOU out on the line, so that you can get KILLED, what would you do?"

The Fight for Survival slog match between, Johnny 'just tying his shoes' America, and Warmonger Liar, Sean Hannity - televised World-Wide!!! With Cheerleaders, beer, pizza, and beer! YEAH WAY!!!

Who's with Me?

-

A Public Letter to the "American" Coast to Coast Radio Network:

1. We, as the People, demand you allow US, the human species to openly discuss the public evidence on who funded the terrorist acts of 911 according to the FBI. And full disclosure on the science of building Seven.

2. That the Iraq war never had, nor ever will have a justification, concluding Naturally, that all stolen Iraqi

money must be returned by the will of GOD to the victims; with those responsible for stealing it, made to pay US back, with the true American Patriots to be found, backing US up 100 percent. The bush administration has teamed our kids to mercenary forces who have no loyalty to freedom but to freely die another Marine for more dying stolen values. While successful at it corporate America, just lies and lies and lies without shame, nor apology for the death of your poor cowardly kin.

3. Also, that mercury tainted vaccines are deadly stupid. Mercury is scientifically understood, without question, (no doubt) to be a neural-toxin, and, Influenza is a constantly mutating virus. So, pre-determining which 'deadly' strain is going next, is only because the WHO wants to continue killing US for huge cash profit. With cult slaves, like those who forced Jones Towners to drink at gun point, are the same as those who now demand we give our girls of America from Texas such. It seems the magic TV news people don't want to trouble us on this matter of our actual survival.

You must wake up to life's demand for you to defend our dying lives my friend. Please? Make the call, be a man to defend our women. Be a man to protect our children.

Support our call to be heard my brother.

That's all.

-

Iran prepares first nuke strike
http://www.menewsline.com/stories/2007/january/01_15_2.html

See?, demons exist!

More settlers videos: "We killed Jesus, we are proud of it!"
http://www.uruknet.de/?p=m30420&hd=&size=1&l=e

Remind the Son of Man to hunt them down for better good as we together are, why don't You see? I'm Your brother!

-

/ / State Department spokesman on 24 January, "that Iranian agents are involved in these networks and that they are working with individuals and groups in Iraq and are being sent there by the Iranian government." \ \

We all know Iran has been trying to help Iraqis openly, so then, what does such willful contempt for your life grant this 'spokesman'? Or, how about when Bush stated Iranians in Iraq deserved to be murdered? (Later, the demon re-worded himself in attempt to conceal HIS true evil identity.)

Remember the Bathists actually warred to kill and won against
al-CIA-duh forces that were caught hiding in Kurdish
territory. Killed "bin Laden"/bushite forces! Now, bushite
tell US Sunni is in kahoots with Laden. (In otherwords, Kill
a cowardly enemy of Life bushite for America to defend Iraqis
as a godly act.) Death to the bushite, death to our enemies.

/ / Tariq Aziz, the Christian Iraqi Deputy Prime Minister
said in mid September that Baghdad had provided assistance to
America's Kurdish allies, the Patriotic Union of Kurdistan
(PUK), when forces supported by al Qaeda attacked them. He
said, ``We gave [Jalal] Talibani [leader of the PUK] weapons
and ammunition, we helped as much as we could. We are not
allowed of course to go into what is called the
semi-autonomous region of Kurdistan physically, but the help
we gave helped Talibani in his fight for it.'' In fact, added
Aziz, ``Talibani was among the opposition leaders who went to
Washington and spoke to Dick Cheney [US Vice-President] and
Rumsfeld. He told them what had happened, so they [US
government officials] must know.'' [Independent 9/23/02] \ \

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Why Can't Americans See It?

http://www.lewrockwell.com/roberts/roberts193.html

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The Latest Hoax : The real origin of `Iranian' produced IED
http://www.cloakanddagger.de/CLOAKANDDAGGER.DE_TOM%20HENEGHAN/cloak_BB_nov14.htm

-

Light and Shadow

We need to publicly devise some real-world strategies to defeat
the ungodly enemy, the bushite neocon zionist traitors to Life.

http://newmexico.indymedia.org/uploads/2007/01/light-and-shadow.mp3
http://neworleans.media.indypgh.org/uploads/2007/01/light-and-shadow.mp3
http://cleveland.indymedia.org/uploads/2007/01/light-and-shadow.mp3
http://media.indypgh.org/uploads/2007/01/light-and-shadow.mp3
http://miami.indymedia.org/uploads/2007/01/light-and-shadow.mp3

-

Death to our indiscriminately murderous thieving enemies of
God's Creation, who war Creation for bush's personal escape
for the crimes of 911 Christ would say right, wouldn't you say
so likewise my brothers and sisters, of the Muslim, Christian,
and Jewish religions in belief?

-

Great words from the lawyer of the thieving bushite child killers of Haditha

/ / "There were Harriers dropping 500lb bombs on buildings. If they're dropping 500lb bombs without knocking on the door first, how can you argue the troops on the ground did anything wrong?" \ \

5000lbs of radio-active toxic waste that will murder for years more like, while after, then striking again to get the god helpers and screaming children, then even, as in Fallujah, going house to house to murder every one, young and old as the truly Satanic. Just obeying lawless orders to thieve from Humanity as bushite for neocon zionist traitors of G-D doesn't fly in the big book. When anyone kills a bushite, all humanity benefits truly from the defense. You defend a real suffering God by ending a soulless bushite threat against our species.

Bill Sattler.

-

http://www.informationliberation.com/?id=19646

/ / to think that these could have been just dumb ideas or incompetence. (L. Paul Bremer, for instance, who made the "dumb" decision about dismantling the Iraqi army, prior to becoming Iraq's occupation viceroy, had headed the nation's leading risk assessment consultancy, and surely knew what all the risks were of his various decisions.) \ \

Bushite TRAITORS got rid of the ORHA plan.

-

Exit strategy to save the lives of dying Americans:

War bushite LIAR zionist repuglicons who did God wrong on 911

War bushite who LIE to American Sons and Daughters to not hunt those who stole billions with ear-marks, Social Security, no-bid contracts, Iraqi oil, ect.

War those who stole the Iraq Development Fund, and the emergency monies left to save the lives of our dying children

War bushite who feed soldiers radio-active toxic waste as harmless

War bushite who support torturing the innocent to death

War bushite who sing about the joys of murdering Iraqi children

War bushite who beat to death barefoot Iraqi children

War bushite who jokingly beat lamed dogs for fun

War bushite who claim they are lawlessly un-accountable as liars.

War bushite in the air force who target bombing innocent People
like in Fallujah or Somalia with land mines and mini nukes

The godless as lawless bushite is the enemy to America, kill
it proudly for freedom, as an undying love for a real God and
Humanity.

-

http://arkansas.indymedia.org/usermedia/audio/4/us-vs-them.mp3
http://austin.indymedia.org/usermedia/audio/4/us-vs-them.mp3
http://chicago.indymedia.org/usermedia/audio/4/us-vs-them.mp3
http://dc.indymedia.org/usermedia/audio/4/us-vs-them.mp3
http://houston.indymedia.org/uploads/2007/01/us-vs-them.mp3
http://maineindymedia.org/usermedia/audio/4/us-vs-them.mp3

-

/ / she told The Nation. "If I contribute to the Army's
prosecution of Lieutenant Watada on speech-related charges, I
will have colluded in suppression of speech. What could be
more hostile to the ideas of a free press than that?" \ \

Again, a Patriot Soldier whos only crime is that he refuses
to commit a crime in Your name. Do something about it.

-

Real Americans are those of US as humanity that believe
in liberty as Justice for all. Demon bushite nazi
whores, don't like those principles of freedom through
evidentiary findings though, for their false deity,
George W. bush Jr, wouldn't be stealing from the honest
hard working blokes who live for a better day that way.

-

/ / Four US oil companies, namely Conoco, Chevron, Amoco and
Philips have concessions in nearly two thirds of Somalia.
This quartet of oil conglomerates was granted these contracts
in the final days of Somalia's deposed dictator, Siad Barre.

The US first military engagement in Somalia was fully
supported by Conoco. \ \

In the new world, these soulless bomber bushite of the air
force, responsible for blatant first degree acts of murder
against the innocent, would be hunted down by Humans, tried,
then executed gloriously in the defense of our living justly.

-

/ / Al-Maliki has promised he will no longer block action
against the Mahdi Army militia \ \

So, is the block head saying American soldiers so far have died for lawless tyranny? Kill a bushite, to protect the lives of us as innocent victims in other words, right?

-

How Bush misled the world

http://www.theage.com.au/handheld/articles/2004/02/05/1075853996640.html

/ / Once the document was declassified after the war it became known that it contained 40 caveats - including 15 uses of "probably", all of which had been removed from the previously published version. Tenet further ingratiated himself by remaining silent about the OSP. "That's totally unacceptable for a CIA director," said Thielman. \ \

Thielman meant "totally unacceptable" as in HIGH TREASON. Could it be any higher? Deliberately caught misleading whore-dumb Congress to wage his immoral neocon 'escape' with a unjustified criminal brutality against God as all of our Humanity. A great deal more than a million innocent people have been victims to the 'targeted' Zionist killings of the irrational bushite enemy. Lawless enemies to Creation, spreading their toxic waste who thieve, rape and murder without reprimand from corporate news america, shall, I pray daily, die justly in vengeances by the will of a real undying Love for our victimized innocent family. Justice for Humanity.

Please, help US.

The guilty party of Haditha have confessed that targeted killing of innocent children is fair game in their worlds, and as confessed, they 'got away' committing the same Satanic acts - going house to house in fallujah murdering more than two hundred thousand innocent folks for LIAR E-N-E-M-Y Sattler. Bushite corporate america, has stated in silence, the bushite enemies of Haditha will never face public execution for such offences, YOU apparently WILL NOT GRANT IT, too cowardly, and in all likelihood, (like those of the Saudi Blount's third infantry) will be allowed to walk freely down american streets after being found guilty as politically supporting the robbing and murder of innocent men, women, and children all because we're rag-heads or niggers. The, deserving to die as illiterately intolerable bushite drone soldiers HAPPILY, WITHOUT QUESTION, co-operate with ANY lawless mercenary forces such as south african death squad goons in finding the enemies of themselves. Purposelessly ungodly bushite soldiers are told they are DYING to defend Iraqis, while breaking out of prison, mercenaries caught trying to kill innocent Iraqis for fun and profit. While, at the same time, actually having SLAVES from India preparing their lunches!!! And guess what? they're coming to live bushite america as the patriots after

they get killed you're forsaken American Son or Daughter teen!
With millions of stolen American dollars to set up new
'freedom' operations.

Let US demand open radio
communications on the mathimatical facts to save our own
selves further victimhood to their personal contempt for the
true value of YOUR life. Thanks.

Can you help us speak this outrage to your local media outlets?

thanks again bud.

-

Blood Meridian: Bush's High Crimes of Torture and War
http://www.lewrockwell.com/floyd/floyd54.html

-

Impeach for Peace!

http://impeachforpeace.org/index.php

-

I HATE bushite with everything I am.

Johnny America - The Free World President and CEO of Shareware Earth
Co.

Join the cause!

Johnny America

-

http://newmexico.indymedia.org/uploads/2007/01/battle_plan_of_christ.mp3
http://nhindymedia.org/usermedia/audio/11/battle_plan_of_christ.mp3
http://houston.indymedia.org/uploads/2007/01/battle_plan_of_christ.mp3
http://radio.indymedia.org/uploads/battle_plan_of_christ.mp3
http://istanbul.indymedia.org/uploads/battle_plan_of_christ.mp3

-

http://s3.amazonaws.com/911timeline/main/AAafghanwar.html

snpd

-

No evidence against an accused is US being truly abused

"These are not terrorists, they are not al-Qeada, they are
ordinary innocent men, women and children."

http://www.prisonplanet.tv/audio/131206rivero.mp3

-

"Victory means exit strategy, and it's important for the President
to explain to us what the exit strategy is."

- George W. Bush, discussing Kosovo, Houston Chronicle, 04-09-99

-

"First we sent Americans to their deaths for your lie, Mr.
Bush, now we are sending them to their deaths for your ego.

www.crooksandliars.com/2007/01/02/olbermann-special-comment-on-sacrifice/

-

Death to the godless bushite, death to America's lawless enemies

DUMFUK BUSHITE ENEMY OF GOD "This is not a job in anyway
shape or form, this is not a job. this is a lifestyle. and
we choose this type of lifestyle."

Traitor LIAR Hannity "Knowing the danger?"

DUMFUK BUSHITE ENEMY OF GOD "Yeah."

Traitor LIAR Hannity "Well, isn't that the definition of Bravery?"

The DUMFUK ENEMY OF CHRIST "Uhhuh."

See, TRAITOR Hannity [who deserves to be executed for the
treasonous DOCUMENTED lies he tells America almost daily]
would claim any and all serial murderers and rapists in
America are the definition of bravery. Bushite dumfuks
deserve to die as enemies of America because they openly,
purposefully target the innocent to rob from and murder, as
bushite did on 911.

Americans would rather DIE, than
hunt George Norry, or Art bell for questioning. A nation of
fascist nazi cowards, who go silently to their graves in their
support of torturing innocent people to death for the thieving
EVIL bushite's pleasure.

Death to the godless bushite, death to America's lawless enemies.

/ / "How could I order men to die for something I believe is
wrong?" \ \

They eat radio-active toxic waste before asking, why would
we eat radio-active toxic waste without thinking?

-

"For every fatal shooting, there were roughly three non-fatal
shootings. And, folks, this is unacceptable in America. It's
just unacceptable. And we're going to do something about it."

- George W. Bush

Kill a bushite and God wiill love you for
defending US, the innocent in war time.

-

LISTEN CAREFULLY

"The truth of that matter is, if you listen carefully, Saddam would still be in power if he were the president of the United States, and the world would be a lot better off." George W. Bush

SADDAM'S HANGING VERDICT IS ILLEGAL AND UNJUST
http://www.uruknet.info/?p=m29377&hd=&size=1&l=e

BUSH TO GENERALS: GET LOST
http://movies.crooksandliars.com/SC-Bush-GeneralsGetLost.wmv

The demon enemy of America, Our Mr. bush Jr., responsible for 911, creates hope in God that honorable men of this Earth, will assist the Humans in hunting to kill bushite enemy terrorists who support torturing and thieving from US, the godly as innocent. Every time we hear of another bushite death, god celebrates OUR wins over the ungodly demon antichrist forces. Death to the bushite, death to our enemies who murder innocent people with LIES against America and GOD.

-

Realize, CNN and CBC have received this post, yet, continue to lie to dying soldiers for the unholy benefit of the enemy neo-con.

-

When we cancel other people's human rights, we cancel our own.

= Highwater =

--

A Soldier's Life Held in Contempt

The way I see it, is that I am completely documented correct on who was responsible for the terrorist crimes of 9/11.
snpd

The affidavit that starts "1. National Security Issues" was submitted in conjunction with my motion to request assistance from the Court. The additional paper "Stand Together or Don't", was an added part of the same affidavit.

The affidavit with 38 positions was submitted with the two motions, "Order of Production" and "for the Crown to Stay Proceedings". Duplicate copies of the same affidavit were

submitted in each respect.

-

/ / In another characteristic incident, Bush asserted, as he has repeatedly, that any decision on withdrawal of American troops from Iraq "will be made by military commanders, not by politicians in Washington DC." \ \

Exactly. The demon enemy of life itself, Our Mr. bush Jnr., who publicly parades his contempt for freedom and God, must be stopped for all costs, that include for sure, your own as reader.

Realize, CNN and CBC have received this post, yet, continue to lie to dying soldiers for the benefit of the enemy neo-con.

-

AFFIDAVIT

AFFIDAVIT OF JOHNNY WIZARD

I, Johnny Wizard, in the city of Winnipeg, Province of Manitoba MAKE OATH AND SAY:

1.

Pakistani ISI Director General Ahmad orders an aide to wire transfer about $100,000 to hijacker Atta. Ahmad later resigns after the transfer is disclosed in India and confirmed by the FBI. [Dawn, 10/8/01, Times of India, 10/9/01, Wall Street Journal, 10/10/01, AFP, 10/10/01]

2.

On March 3, 2002, MSNBC's Jim Miklaszewski reported that he had received anonymously, top secret presidential war strategy documents dated September 9th, 2001, originating from Condolezza's office, outlining a strategy to invade Afghanistan premised on blaming bin Laden a terrorist, but providing no evidence to back up the allegations, thereby guaranteeing criminal invasion. Only workable if Laden pleads innocence to a crime that hadn't yet taken place, a crime serious enough to "justify" sacrificing American GIs truly for a liquefied natural gas pipe line for pension thieving Enron. ["The Dahbol Working Group" and Bridas] Any evidence for any offense would have been sufficient to have Muslim fundamentalists hand Laden immediately over, as they had offered [as others of other nations had also] repeatedly during the Clinton years.

CBC and CNN have still, to this day, consciously refused to do any follow up on the intelligence, deciding instead on behalf

of dying people everywhere, our public devolvement of a just society.

3.

RTÉ News - US rejects Taliban bin Laden evidence calls
21 September 2001 17:41

The White House has rejected requests from Afghanistan's ruling Taliban for proof that Osama bin Laden was responsible for last week's attacks. According to the US Secretary of State, Colin Powell, the United States has enough evidence to try bin Laden in an American court.

The US Government said there would be no negotiations.

4.

[This following document was the official damning account]

Responsibility for the terrorist atrocities in the United States
4 October 2001
http://www.pm.gov.uk/output/page3554.asp

[This Internet Domain is Britain's Prime Minister's]

"This document does not purport to provide a prosecutable case against Usama Bin Laden in a court of law."

The document doesn't hold ANY case, as that was the strategy.... See?

5.

Investigating the Investigation

http://www.alternet.org/story.html?StoryID=17816

After playing a tape of Cheney's statement, Russert asked Daschle, "Did the vice president call you and urge you not to investigate the events of Sept. 11?" Daschle flatly contradicted Cheney: "Yes, he did, Tim, on Jan. 24, and then on Jan. 28 the president himself at one of our breakfast meetings repeated the request."

6.

ABCNEWS.com : FBI Called off Terror Investigations
http://abcnews.go.com/sections/primetime/DailyNews/FBI_whistleblowers021219.html

Two veteran FBI investigators say they were ordered to stop investigations into a suspected terror cell linked to Osama bin Laden's al Qaeda network and the Sept. 11 attacks...

`You Will Not Open Criminal Investigations'

7.

October 9 2001 - The Times of India

"While the Pakistani Inter Services Public Relations claimed

that former ISI [the "Pakistani CIA"] director-general Lt-Gen Mahmud Ahmad sought retirement after being superseded on Monday, the truth is more shocking.

8.

No evidence was brought against Laden for nine eleven, none. [So according to Bush's official top secret Presidential directives] While Laden himself claimed he played no part in 911. Still, to save the lives of third worlders on the brink of starvation,

9.

former FBI deputy director and murder victim John O'Neill

"the main obstacles to investigating Islamic terrorism were

U.S. oil corporate interests and the role played by Saudi Arabia."

10.

Alex Jones interviewing Former German Defense Minister Andreas Von Buelow

"Bush signed W199I months before 911 ordering the FBI not to stop Al-Qaeda. They threatened to arrest FBI agent Robert Wright if he tells us what he knows."

11.

Mr. Bush was quoted somewhere regarding Mr. Laden's guilt of complete innocence with "We don't need any evidence, we know he's guilty."

12.

www.govexec.com/column/forwardTodaysColumn.cfm?sectionID=14

" [FBI's] Edmonds concluded that documents clearly showed that the Sept. 11 hijackers were in the country and plotting to use airplanes as missiles. She said documents also included information relating to their financial activities. "

13.

The honorable Argentinean oil company Bridas' relationship can not be understated as the Bush Administration's primary motive on criminal invasion of Afghanistan to save his biggest corporate backers, the American pension thieving Enron.

[snpd]

33.

Blix nor Elbaradei, nor Kofi, suggested, implied, or stated, that Iraq had failed to comply with the newest U.N. resolution: 1441.

HANS BLIX: "And at this juncture, we are able to perform professional no-notice inspections all over Iraq and to increase aerial surveillance..."

With complete, one hundred percent access to go where ever the Bush Administration pleased without delay, left a situation of an unjust war only detrimental to an ability to bring about any good or better thing. American soldiers are being sacrificed for no better good or reason understood, for if progress will ever be made, it will be when they work to bring about a political situation that was there in Iraq before the Bush Administration starting murdering innocent people for nothing . Well, not completely, for Bremer shipped 19 billion to Greenspan early on, then, hundreds of millions were sent back.

34.

Professor Steven E. Jones, a tenured BYU professor, went public several weeks ago after releasing a 19 page academic paper, essentially showing how the laws of physics do not support the WTC's freefall[...]

35.

"To be truthful about it, there was no way we could have got the public consent to have suddenly launched a campaign on Afghanistan but for what happened on September 11..."

Tony Blair Speaking To House of Commons Liaison Committee

36.

The Washington Post, 23 September 2001.

At American urging, Ahmed traveled ... to Kandahar, Afghanistan.

-

Since I am representing myself on these particular criminal matters, snpd I would request legal assistance from the Court in these following areas.

1. National Security Issues

<BIG SNP>

-

you know what is right, though you may still be blind, never too late to change your mind, we are all in agreement, in truth we rise, evil is just the deceived disguised...

STAND TOGETHER, OR DON'T

Our Gambling Problem

Instead of our government deciding what services we need and are willing to pay for, they'll have us think that by actively

promoting gambling to those we can take advantage of, somehow serves them right, and us well.

(snpd)

Are you feeling okay buddy? Let us get out of here, and go to talk.

-

HERO

/ / That is a high act of treason. And it's not, "oh well, but maybe it's not true.." No, we have the two documents of question. \ \

What is the Coast to Coast radio network Head talking about tonight?, the re-re-re-hashing of the "Allaways Interslinging" Bigfoot phenomenon? Where was I...

Look, you're not going to go to hell for not giving me a couple of dollars to further my cause, but it sure couldn't help to leave me without any support here whatsoever.

-

White House keeps dossiers on more than 10,000 'political enemies'

http://www.capitolhillblue.com/artman/publish/article_7625.shtml

-

WHICH SIDE ARE YOU ON?

/ / Specialist Damien "Monster" Corsetti--known affectionately as the "King of Torture" \ \

Will America hunt to kill the un-arrested bushite cancer that knows thyself as the "King of Torture"? Who's blasphemous open contempt for all that is God doesn't even earn him a spot on America's Most Wanted?

-

http://www.informationclearinghouse.info/article10785.htm

/ / an epic study that documents the systematic nature of torture by the Americans, and how casual it is, even enjoyable. . \ \

http://www.informationclearinghouse.info/article10362.htm

/ / [...] and it is treason. [...] \ \

/ / · less than one per cent of the population believes coalition forces are responsible for any improvement in security; \ \

(Don't miss "Johnny Wizard Vs. the bushmob")
http://mailgate.supereva.com/soc/soc.culture.pakistan.politics/

/ / Who cares about yourself if you won't listen as reason to? What can you lose when you have granted to be blindly stolen from? \ \

-

http://www.cageprisoners.com/articles.php?id=10136

/ / Irwin Cotler's credo is supposed to be "Justice, justice shall you pursue" not ingratiation with superpowers who practice torture. \ \

-

"THEY SAY THEY TOOK OUR LAND. BUT WHERE DID THEY TAKE IT?"
--DAVID MONONGWE (Hopi)

"Epiphany"

http://ntimc.org/newswire.php?story_id=308&media_type=TEXT

/ / In fact, as they made clear on page one, the authors had stripped out Falluja; their estimate of 98,000 deaths would otherwise have been much higher. \ \

-

/ / Why does any American think that spying without a warrant has any more effect in reducing the threat of terrorism than spying with a warrant? \ \

Yet, FOX, CNN and CBC silently plead ignorance when broadcasting for bushite favor on this rights issue. He wants to pursue terrorists they'll tell us, but CNN, CBC, FOX and others, won't tell us why Bush secretly feels FISA would jeopardize such claimed inquiries? Sure, bushites are dumb, but we're not that dumb to except this without knowing. It's similarly like, Bush can't be my Chief because, Congress didn't declare war like the Constitution Laws. So, what's he going by then?, right?

-

True Blue American Jew

http://www.frontpagemag.com/Articles/ReadArticle.asp?ID=25994

/ / When hundreds of millions are calling for the
extermination of the Jews of Israel this is more than a lie;
it is a blood libel. \ \

What is wrong with this ungodly stupid zionist demon nazi fuk
eh? snpd Americans beware
of the Zionist in your midst who LIES to cheat and steal from
the innocent true blue American Jew included.

-

Now that atheist THIEF Israel has 'legalized' MURDER,

/ / "Israel is embarking upon a more aggressive approach to
the war on terror that will include staging targeted killings
in the United States and other friendly countries, former
Israeli intelligence officials told United Press
International. \ \ The zionist criminal element can't call
OUR COPS we see... and with enemies like these... We should
don our stars an crosses, load our guns, and hunt to kill
every last 'escaped' first degree murderer zionist,
no...?

-

No evidence against an accused is US being truly abused

"These are not terrorists, they are not al-Qeada, they are

ordinary innocent men, women and children."

http://www.prisonplanet.tv/audio/131206rivero.mp3

-

Ahmad funded Atta

American soldiers are being terribly mislead by the Bush
administration to undermine freedom for Americans, by
suggesting an effective war strategy is to ignore all the 911
evidence, and go off instead to blindly blame bad Afghans or
badder Iraqis, is an insult to all honorable police services.
Services not left permanently perplexed by the onslaught of
repeatedly ignoring the same consequences where more innocent
people fall dead as bombing victims, while LIAR bushite
continue to charge/thieve from both, you as an American, and
me, a member of our victimized Humanity. You see, your demon
liar has ruled that all the Peoples of Earth have no legal
rights to exist freely in our public court rooms. Bad news
that is for OUR dying America my friend. Support my call for
an open dialog on returning a reason for believing, for
Freedom is Justice, not a censored world ruled by puppet

people in shadows without free will left un-accountable.

http://maritimes.indymedia.org/uploads/2007/08/realthing.mp3
http://arizona.indymedia.org/uploads/realthing.mp3
http://la.indymedia.org/uploads/2007/08/realthing.mp3
http://newmexico.indymedia.org/uploads/2007/08/realthing.mp3
http://neworleans.media.indypgh.org/uploads/2007/08/realthing.mp3
http://dc.indymedia.org/usermedia/audio/3/realthing.mp3
http://media.indypgh.org/uploads/2007/08/realthing.mp3
http://houston.indymedia.org/uploads/2007/08/realthing.mp3

//

80. Mark Morgan/s Abuse

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 22:40:55 UTC
From: Not Roger <anon@anon>
Message-ID: <14t0ep.4qa.19.1@news.alt.net>
Source record: 37644
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

Today, Mark has made 183 posts. Yesterday he made 186.
It is time to let Tera News know.
I'm going to send them a Certified Letter to get their attention.

Abuse problems from Mark Morgan can be reported to
abuse@nntpserver.com
or can be mailed to
722 LWW
Osceola, IN 46561
US
574 674 6063

81. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-03 23:45:59 UTC
From: Myal <Dumaree@hotmail.com>
Message-ID: <X6Psi.15694$4A1.10319@news-server.bigpond.net.au>
Source record: 37645
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

John Doe wrote:
> Your in the wrong NG with your garbage!
>

you replied to garbage , and top posted at that

> <Mark@TayleorRobesin.org> wrote in message
> news:g0q6b3de8egq7g8ttqqqjdlvpbs52gcoc2@4ax.com...
>
>>On Fri, 03 Aug 2007 16:07:56 +0100, johannes
>><johs@size-nospamme84764-fitter.com> wrote:
>>
>>
>>>
>>>The little lost angel wrote:
>>>
>>>>On Thu, 02 Aug 2007 10:35:37 -0700, Tim May
>>>><timcmay@removethis.got.net> wrote:
>>>>
>>>>
>>>>>I don't know about your friend, but most "Asperger's Syndrome"
>>>>>diagnoses are self-diagnoses. The number of proclaimed AS cases has
>>>>>gone up by a factor of 20 since 1980.
>>>>
>>>>In his case, he went through quite a lot of examinations before the
>>>>diagnosis was made so I doubt it was self diagnosis. Frankly most of
>>>>us are clinically insane one way or another, if not many ways, so I
>>>>don't really care if my friends has AS or BS, there's no excuse for
>>>>being mean or stupid as a result of being too lazy to think =P
>>>
>>>Since Asperger's is is described as a mild form of Autism, it leaves
>>>a lot of doors open for diagnosis. In fact any circumscribed area of
>>>interest: cars, computers, trains, meteorology and astrononi...etc.
>>>could be a symptom of Asperger's http://www.aspergers.com/aspclin.htm
>>>Any nerd characteristics is certainly very suspect. Anyone who dives
>>>into one particular subject. Doing math is certainly a health hazard.
>>>
>>>I sometimes wonder if all this really comes from some dissatisfaction
>>>by others who would like to get closer to the sufferer, but doesn't
>>>quite catch their imagination. Hence it's as much other people's
>>>problem as the sufferers. There should be an Asperger's contact
>>>deficiency syndrome...
>>
>>

>>is there a point here other than vent some hatred you feel man
>>
>>"one useless man is disgrace 2 become a law firm 3 or more become a
>>congress"
>>adams
>>
>>woger you are a Congress all in your own head
>>
>>http://kb9rqz.bravejournal.com/
>>
>>G
>>
>>--
>>Posted via a free Usenet account from http://www.teranews.com
>>
>
>
>

82. Re: Homebrew wifi antenna coax adapters

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 01:22:36 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns9981D996695mcoslocomcastnet@216.196.97.136>
Source record: 37646

Roy Lewallen <w7el@eznec.com> wrote in
news:13b6unqh4co9v2f@corp.supernews.com:

> Michael Coslo wrote:
>>
>> You might want to read this one:
>>
>> http://www.mikeholt.com/documents/mojofiles/DuPontTeflonFEP2003MSDS.pd
>> f
>>
>>
>> I'll take the watermelon over teflon fumes any day.
>
> Although not unheard of, FEP is less commonly found in cables than
> PTFE. Do you have a link for the PTFE hazard sheet?
>
> Both are Teflon, which is a DuPont trade name for a variety of related
> materials.

http://msds.dupont.com/msds/pdfs/EN/PEN_09004a2f80006d37.pdf

for the Delrin PFTE. It looks like very similar effects. It is something
that this very stable chemical undergoes such a transformation when very
hot.

What bothered me a little bit was that this stuff is used in fireworks.

- 73 de Mike KB3EIA -

83. Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 03:07:24 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f90qht$j9l$1@nnrp.linuxfan.it>
Source record: 37647

With the future sale of a chunk of old tv @ 700Mhz, we will soon see
questions about these antennas for a new breed of hardware ...

In the mean time, the FCC is going to assure large telecom corps to
maintain and expand their strangle hold on services, this will start
getting you up to speed:

http://www.msnbc.msn.com/id/20108087/

Our criminal political system shafts us yet one more time ... :-(

Regards,
JS

84. Mark Morgan's continued abuse of Amateur Radio groups

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 03:47:56 UTC
From: Not Roger <anon@anon>
Message-ID: <14tieg.jtq.17.1@news.alt.net>
Source record: 37648
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

"Myal" <Dumaree@hotmail.com> wrote in message
news:X6Psi.15694$4A1.10319@news-server.bigpond.net.au...
> John Doe wrote:
> > Your in the wrong NG with your garbage!
> >
>
> you replied to garbage , and top posted at that
>
> > <Mark@TayleorRobesin.org> wrote in message

For whatever good it may or may not do, I've already sent a complaint to
Tera News regarding Mr Morgan's abuse of the Amateur Radio newsgroups.

I understand that others have, or are following suit.

186 posts to r.r.a.p on Aug 2 and 183 posts on Aug 3 are excessive by any
stretch of the imagination.

Nor is this unusual, for there has been many a month when KB9RQZ has made
1500 to 1600 posts in the Amateur Radio groups and has gone on record as
stating that his sole purpose was to disrupt the groups with repetitive
posts.
It is because of him that rec.radio.amateur.moderated was formed. He has
subsequently been banned from that newsgroup AND from posting to QRZ.com as
well.

I plan next to document his continued abuse, print it out, and mail it to
Tera News located in Osceola, Indiana on the outside chance that Tera News
does not read the complaints emailed to them.
If he continues and Tera News fails to respond, I next plan to send a
missive to his provider, Hughes Net.

85. Re: Mark Morgan/s Abuse

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 11:11:00 UTC
From: Dave <noone@nowhere.com>
Message-ID: <89Zsi.1829$CE4.173@trndny03>
Source record: 37649
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

who is mark morgan? he must have made my kill file a long time ago, haven't seen a single post recently.

"Not Roger" <anon@anon> wrote in message news:14t0ep.4qa.19.1@news.alt.net...
> Today, Mark has made 183 posts. Yesterday he made 186.
> It is time to let Tera News know.
> I'm going to send them a Certified Letter to get their attention.
>
> Abuse problems from Mark Morgan can be reported to
> abuse@nntpserver.com
> or can be mailed to
> 722 LWW
> Osceola, IN 46561
> US
> 574 674 6063
>
>
>

86. Re: Mark Morgan's continued abuse of Amateur Radio groups

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 11:36:57 UTC
From: KH6HZ <kh6hzA@Tarrl.net>
Message-ID: <CyZsi.134812$LE1.110930@newsfe13.lga>
Source record: 37650
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

"Not Roger" <anon@anon> wrote:

> I plan next to document his continued abuse, print it out, and mail it to
> Tera News located in Osceola, Indiana on the outside chance that Tera News
> does not read the complaints emailed to them.

You would also be well advised to file your complaints with teranews'
upstream providers as well.

For example, Teranews is serviced by NetStream/Fiber Communications:

Netstream/Fiber Communications
3300 Douglas Blvd Suite 450
Roseville, CA 95661
916.780.0707

Which is in turn fed by

Internap Network Services
Suite E-100
250 Williams Street NW
Atlanta, GA 30303
404.302.9700

87. Re: your rant

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 11:42:24 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
Message-ID: <46b465bc$0$8000$4c368faf@roadrunner.com>
Source record: 37651
Cross-posted to: alt.conspiracy,rec.radio.shortwave,alt.radio.broadcasting,rec.radio.amateur.antenna,talk.politics.libertarian

Darfur

88. Re: King of America speaks out publicly [Press Release] - Live broadcasts out in the fields, trumping evil demons by the power of the Word - We, as the People, demand you allow US, the human species to openly discuss the public evidence on who funded the terrorist acts of 911 according to the FBI

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 12:27:17 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1186230437.352803.264090@d30g2000prg.googlegroups.com>
Source record: 37652
Cross-posted to: alt.conspiracy,alt.radio.broadcasting,rec.radio.amateur.antenna,talk.politics.libertarian

On Aug 3, 2:08 pm, Get_bush_4_Je...@hotmail.com wrote:
> / /Iowa GOP is STILL planning to use the easily rigged
> Diebold computers to "count" the vote at the Straw poll! \ \
>
> THIS IS TREASON. But, look, teen soldiers are commanded to be
> bushite nazi savages, who cowardly refuse to defend America
> from Mr. al-Qaida, General Ahmad, all to thieve further from
> the undefended American public.
>
> The Arts - an Inside Job
>
> Look, CNN, CBC, and FOXNEWS is lying to US. They know
> the EVIL bushmob did 911, and have decided to kill
> your kids for more rewards, instead of defending the
> innocent. They hold the true value of YOUR LIFE in
> contempt. Demand justice to defend our freedoms why
> don't You?
>
> http://media.indypgh.org/uploads/2007/07/the_arts_-_an_inside_job.mp3http://boston.indymedia.org/usermedia/audio/5/The_Arts_-_an_inside_jo...http://rochester.indymedia.org/usermedia/audio/4/the_arts_-_an_inside...http://www.ntimc.org/attachments/jul2007/the_arts__an_inside_job.mp3http://istanbul.indymedia.org/uploads/2007/07/the_arts_-_an_inside_jo...http://imctj.espora.org/uploads/2007/07/the_arts_-_an_inside_job.mp3http://www.stlimc.org/usermedia/audio/4/the_arts_-_an_inside_job.mp3http://newmexico.indymedia.org/uploads/2007/07/the_arts_-_an_inside_j...https://israel.indymedia.org/usermedia/audio/4/the_arts_-_an_inside_j...http://houston.indymedia.org/uploads/2007/07/the_arts_-_an_inside_job...http://cleveland.indymedia.org/uploads/2007/07/the_arts_-_an_inside_j...
> ttp://pr.indymedia.org/uploads/2007/07/the_arts_-_an_inside_job.mp3http://neworleans.media.indypgh.org/uploads/2007/07/the_arts_-_an_ins...http://dc.indymedia.org/usermedia/audio/4/the_arts_-_an_inside_job.mp3
>
> [AMERICAN PAID FOR] Israelis Kill 34 [godly innocent],
> Injure 86 [godly innocent], Grab 220 [godly innocent]
> - [nazi corporate TV amerka]World Snoreshttp://www.imemc.org/article/49685
>
> -
>
> MY DEMANDS
>

> / / eight million Iraqis require immediate emergency aid \ \
>
> I, as the Son of Man, DEMAND, America order millions of
> gallons of clean drinking water to be shipped immediately to
> Iraq to save the lives of US, the Human species. Please, help
> US make this a reality. Today. Please.
>
> http://houston.indymedia.org/uploads/2007/07/justice_for_christ_in_am...http://neworlean
s.media.indypgh.org/uploads/2007/07/justice_for_chris...http://www.stlimc.org/usermedia/au
dio/8/justice_for_christ_in_america...http://chicago.indymedia.org/usermedia/audio/8/justi
ce_for_christ_in_...https://israel.indymedia.org/usermedia/audio/8/justice_for_christ_in_.
..http://austin.indymedia.org/usermedia/audio/8/justice_for_christ_in_a...http://arizona.i
ndymedia.org/uploads/justice_for_christ_in_america.mp3http://istanbul.indymedia.org/upload
s/2007/07/justice_for_christ_in_a...http://boston.indymedia.org/usermedia/audio/3/Justice_
for_Christ_in_A...http://cleveland.indymedia.org/uploads/2007/07/justice_for_christ_in_...
http://www.indymedia.no/usermedia/audio/8/justice_for_christ_in_ameri...http://media.indyp
gh.org/uploads/2007/07/justice_for_christ_in_americ...http://newmexico.indymedia.org/uploa
ds/2007/07/justice_for_christ_in_...
>
> -
>
> THEY GANG RAPED A FOURTEEN YEAR OLD WHILE CARRYING LOADED
> WEAPONRY
>
> AFTER RAPING THE CHILD IN FRONT OF HER FAMILY - THEY SLOWLY
> MURDERED EVERY SINGLE ONE AS INNOCENT GOD LOVING HUMANS
>
> - but -
>
> BUSHITE AMERKA CLAIMS THIS DOESN'T WARRANT THE DEATH SENTENCE?
>
> Again, evil bushite THIEVES claim they are justified when
> indiscriminately bombing populated cities to MURDER US People.
>
> General Johnny would teach MY soldiers to immediately arrest
> to kill for such criminality. In fact, I'd likely even throw
> in some bonus cash, an a Freedom medal from all lovers of
> Liberty. Did you know, many bushite sing a song about killing
> innocent young girls for pleasure? Did you know that also, an
> "American" radio host likes playing that same song as recorded
> on "American" airwaves? Fight back for God, or die from self
> contempt my friends, fight back for life and love.
>
> Again, evil bushite THIEVES claim they are justified when
> indiscriminately bombing populated cities to MURDER US People.
> All to help 'escape' the neocon ENEMIES of America - they also
> support "officially" destroying Our public infrastructure,
> thieving humanitarian aid, while incarcerating innocent people
> to collectively be punished by the TRULY Satanic enemies of
> GOD. Ten "CIA" bushite enemies have been found to have

> kidnapped near one thousand innocent Americans to be tortured
> to death, in tyrannical nations friendly under American funding
> by Bush unquestioningly. Fight back for your neighbor, fight
> back for America, fight back for YOURSELF. Or, don't.
>
> See the bushite, you bill it for Christ, You bill it for
> America, You bill it for them, you bill it for US.
>
> Murdering bushite gang rapists try escaping true accountability
>
> http://womensspace.wordpress.com/2006/07/09/rape-of-the-hadji-girl-pa...
>
> / / Why did the Army, within three hours, return to tell
> neighbors that this was the work of "insurgents" apparently
> without any investigation? \ \
>
> See? in Johnny's world, that "the Army" person would have
> been the FIRST questioned, then likely arrested. But look, it
> hasn't even been acknowledged as evil doing in progress.
> (Every time you read, "The Army says..", become aware.)
>
> It should be noted, ungodly bushite enemy commanders call
> every car bomb in Iraq, al-Qaida, without even pretending to
> do freedom operations for YOUR protections, as just another
> dead body in the rubble. (Likely caused by Aegis for cash
> profit.) So then, look my friends, Amerka refuses to demand
> justice to save the lives of their very own sons and
> daughters. And when, WE, Humanity, beg them to answer our
> calls for accountability, they refuse but for to LIE, stating
> publicly, "God" would grant robbing from innocent others, to
> enrich their great unholy tyrannical demon liar. They know
> easily that the bushmob did 911, and they like it. No, they
> crave it. The chance of murdering their own "loves" to
> enslave the human race for the antichrist, sounds great, just
> as long as they can get themselves in on the take.
>
> / / Idiot General Says Dead U.S. Troops Best Reason To Keep
> War Going And Kill More U.S. Troops
>
> [Option B: More Dead U.S. Generals And Fewer Dead U.S.
> Troops ?] \ \
>
> If the sacrifice of soldiers lives is going to mean anything,
> it going to mean how long it took, Americans to care for
> themselves as really worth something. When, or if that day
> should come, it will be the day where Iraqis victims are seen,
> as just you or me. Today, there is nothing more i wish, than
> to hear bushite nazi savage thieves for the neocon die
> rightly, before the innocent they target for murder. All in
> an attempt to 'escape' those truly responsible for the crimes

> of 911 a bushite whore practices, as an enemy to Christ and
> America.
>
> Just look at that my friends of Earth just look at that.
> Americans speak only contempt for the value of human life.
> Every day, INNOCENT Iraqis die by the criminal actions of the
> demonic neocon enemy forces of EVIL, and our deaths as the god
> loving mean nothing. A small few die in a bridge ACCIDENT,
> and every corporate channel devotes the entire day's news as
> it. Allawi confesses to killing children for "CIA" money, and
> there, as with the soldiers who braggingly, beat innocent
> children to death for sexual pleasure, bomb people
> indiscriminately, or steal all the humanitarian aid, don't
> command your slightest concern as impartial paying for it TV
> viewers. They say, US people who aren't "Americans", do not
> deserve due process, the freedoms they claim to own
> exclusively, of which WE, are granted nothing of. See?, by
> not using evidence to from your guilty verdicts, how can it be
> therefore possible, to know, you've arrested, tried, then
> executed a mass murdering NEOCON war criminal? I don't think
> Americans could possibly be more disrespectful to God and
> country, Johnny and Justice right now, do You?
>
> http://existentialistcowboy.blogspot.com/2007/06/911-culprits-why-tow...
>
> / / We know that a crime was committed on 911. George W.
> Bush, of course, quashed all investigations before they could
> begin. Since when are crimes not investigated? [...] It is
> not too late, however, to begin such an investigation. There
> is no statute of limitations on mass murder. \ \
>
> We, as Humanity, have to rise against the neocon LIAR enemies
> who forsake the value of Human life. Death to the bushite,
> death to the enemies of America's America.
>
> / / Army Secretary Pete Geren asked a military review panel to
> decide whether Lt. Gen. Philip Kensinger, who led Army
> special forces operations in Afghanistan after the Sept. 11
> attacks, should also have his rank reduced. \ \
>
> A bushite demon CAUGHT aiding and abetting the crime of FIRST
> DEGREE MURDER of a trying to be Patriot Soldier, is made to
> fear in bushite amerka, he might face a reduction in rank!
> MURDER~!
>
> / / Congressman Dennis Kucinich, a member of the House
> oversight and government reform committee, which has been
> investigating war contractors. "There's no democratic control
> and there's no intention to have democratic control here." \ \
>

> Right. The demonic lawless actions of Aegis posing as
> al-Qaida killing police officers undermine freedom for Iraqis
> and Americans, alone with ALL the rest of US. All criminally
> gotten assets of lawless mercenaries will be hunted by every
> police service; those that complain as traitors to Freedom as
> Justice, WE, the real Patriot warriors, committed to defensive
> measures, will be rewarded
> ...
>
> read more »

DOH !

89. Re: your rant

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 12:28:02 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1186230482.510472.25700@i13g2000prf.googlegroups.com>
Source record: 37653
Cross-posted to: alt.conspiracy,alt.radio.broadcasting,rec.radio.amateur.antenna,talk.politics.libertarian

```
On Aug 4, 4:42 am, Christopher Cox
<chrisTOPHER...@coboxincORORATED.com> wrote:
> Darfur

doh, Doh. DOH !
```

90. Re: Mark Morgan's continued abuse of Amateur Radio groups

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 12:39:34 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1186231174.169000.44290@i13g2000prf.googlegroups.com>
Source record: 37654
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy

On Aug 4, 4:36 am, "KH6HZ" <kh6...@Tarrl.net> wrote:
> "Not Roger" <anon@anon> wrote:
> > I plan next to document his continued abuse, print it out, and mail it to
> > Tera News located in Osceola, Indiana on the outside chance that Tera News
> > does not read the complaints emailed to them.
>
> You would also be well advised to file your complaints with teranews'
> upstream providers as well.
>
> For example, Teranews is serviced by NetStream/Fiber Communications:
>
> Netstream/Fiber Communications
> 3300 Douglas Blvd Suite 450
> Roseville, CA 95661
> 916.780.0707
>
> Which is in turn fed by
>
> Internap Network Services
> Suite E-100
> 250 Williams Street NW
> Atlanta, GA 30303
> 404.302.9700

DOH !

91. Berryville Hamfest

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 13:33:13 UTC
From: Sonny Hood <wrhood@cox.net>
Message-ID: <7ov8b3d1eqrbc3bsc9l17bp6ur94o5c1pi@4ax.com>
Source record: 37655

SHORT 75/40M DIPOLE
75/40 Meter Coil Loaded Dipole, less than 85 ft. In length, similar to the Alpha Delta DX-DD but made with 12 & 14 gauge hard drawn copper wire not soft house wire, Pre-tuned to the voice segments of the 75/40 meter bands. Coax fed and can be hung as a flat top or inverted Vee. 50 KHz or better less than 2:1 SWR on 75 and below 2:1 across the full 150 KHz of the 40 meter voice segment. Will cover all of 75 meters using an antenna tuner. Can use on some higher HF bands using a tuner. Will handle up to 300 watts.
OLD HAMCALL Disc
MC-60 MIC TRADE for IC-SM20
HP 620 COLOR PRINTER
TAIL GATE SET UP UNDER THE TREES - - - - K4WYS

92. Re: Butternut ,9 bands antenna ,Model HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 14:42:52 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <JbOdnU3si9HoDSnbnZ2dnUVZ8v-dnZ2d@pipex.net>
Source record: 37656

Highland Ham wrote:
> Michael Coslo wrote:
>> John Passaneau wrote:
>>> I can't help with the coil, but the coax is 1/4 wave length at 20m.
>>
>> I think the coil is around 1.5 inches in diameter, and has around
>> 25 turns or so. It's used to fine tune the swr. In a not very elegant
>> looking method, you decrease th inductance by pulling the turns apart.
>> Te better the ground, the worse your coil will look.
>>
>> It isn't terribly sensitive in the manner that the upper coils are, so
>> that 1.5 inch/25 turns description will probably get you in the ball
>> park.
>>
>> I'll check mine (its an HF6V, but should be similar) tonight.
> ============================
> Tnx John ,Unknown and Mike for your response. I'll have a look at the
> Butternut site and make a base coil.
> Many moons ago I witnessed vastly improved performance of a Butternut
> HF6V ,which had the base inductor and initially only 1 ground spike.
> The antenna was situated in the middle of a lawn.
> After covering the area around the antenna with chicken wire mesh
> performance improved by 1 to 2 S-points Within 3 weeks the wire mesh
> was no longer visible and the grass could be cut by moving a mower over
> the wire mesh .
> But with the HF9V I first try to set it up by the book (later in august
> when I'll be back from a trip)
>
> Tnx agn all
>
> Frank GM0CSZ / KN6WH
>
> PS : In the meantime I'll keep monitoring this NG for any additional
> relevant info.
====================================
Butternut manufacturer ' Bencher' has now provided the following info :
QUOTE
Coil Q Base Matching - can be made out of 17 turns of 12 awg magnet wire
wound on a 1 1/4 inch (31.8 mm) form.

Coax 75 Ohm Matching Line - made from RG-11 75 ohm coax, 11 ft 4 inches
(345.4 cm) if solid dielectric, 13 ft 6 in (411.5 cm) if foam type.
UNQUOTE

I am happy with the above . This item can be closed.

Frank GM0CSZ / KN6WH

93. Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 15:18:56 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.04.15.18.55.96373@from.qrz.com>
Source record: 37657

Today I rented a hammer drill and a fitting for driving in ground rods (they even had the right fitting even though they didn't know it and didn't know what I was talking about...).

MAN, DOES THAT THING WORK NICE !!!

Took about two hours to drive 7 rods, after the first one (that I did manually with a sledge hammer) took about 10 hours spread out over a week (just for one).

Those of you who suggested a hammer drill really had it right, and saved my butt... thanks. :-)

Somebody mentioned something about a battery-powered hammer drill. I haven't been able to find anything like that... can someone tell me who makes one?

Thanks again... :-)

94. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 16:38:48 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <4na9b39kee2des0jf7ettumk6ubt2ddnmq@4ax.com>
Source record: 37658

On Sat, 04 Aug 2007 11:18:56 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>Somebody mentioned something about a battery-powered hammer drill. I
>haven't been able to find anything like that... can someone tell me who
>makes one?

IMO they are too light weight to do your job application. They
normally are used for drilling small and shallow holes.

But here's some info.

http://bosch.cpotools.com/hammers_and_hammer_drills/all_hammers_and_hammer_drills/11225vsrh.html

and

http://www.unbeatablesale.com/tpbd904.html?utm_source=froogle4&utm_medium=cpc&utm_term=TPBD904&ci_src=17588969&ci_sku=TPBD904

Danny, K6MHE

95. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 18:27:33 UTC
From: Chuck Olson <chuckolson01@REMOVETHIScomcast.net>
Message-ID: <TeednTUdRatcWSnbnZ2dnUVZ_jOdnZ2d@comcast.com>
Source record: 37659

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in message
news:pan.2007.08.04.15.18.55.96373@from.qrz.com...
>
> Today I rented a hammer drill and a fitting for driving in ground rods
> (they even had the right fitting even though they didn't know it and
> didn't know what I was talking about...).
>
> MAN, DOES THAT THING WORK NICE !!!
>
> Took about two hours to drive 7 rods, after the first one (that I did
> manually with a sledge hammer) took about 10 hours spread out over a week
> (just for one).
>
> Those of you who suggested a hammer drill really had it right, and saved
> my butt... thanks. :-)
>
> Somebody mentioned something about a battery-powered hammer drill. I
> haven't been able to find anything like that... can someone tell me who
> makes one?
>
> Thanks again... :-)
>
Hey - - great news. Thanks for telling us. Now, is there any chance you
might know what brand and model number of hammer drill you used? If you
know the model number of the fitting, that would help, too. Ideally it would
be fun to be able to find the model numbers in the manufacturer's catalog to
see what everything looks like, so when we go to the rental place, we can
tell if they have the right stuff, even if they don't know it themselves.

96. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 19:29:49 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99827F45D3055spectrumhogstarbandn@64.209.0.94>
Source record: 37660

>>
> Hey - - great news. Thanks for telling us. Now, is there any chance
> you might know what brand and model number of hammer drill you used?
> If you know the model number of the fitting, that would help, too.
> Ideally it would be fun to be able to find the model numbers in the
> manufacturer's catalog to see what everything looks like, so when we
> go to the rental place, we can tell if they have the right stuff, even
> if they don't know it themselves.
>
>
>

Check out

http://bosch.cpotools.com/hammers_and_hammer_drills/hammer_drills/?
ref=googaw808e

for quality hammer drills.

Ed K7AAT

97. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 19:30:44 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.04.19.30.44.587275@from.qrz.com>
Source record: 37661

On Sat, 04 Aug 2007 11:27:33 -0700, Chuck Olson wrote:

> is there any chance you might know what brand and model number of hammer
> drill you used?

Yup, it's the Hilti TE-76-ATC.

Nobody I ever heard of... but it sure works nice.

98. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 20:28:16 UTC
From: The Shadow <Repose@Zilch.com>
Message-ID: <Hj5ti.72830$dI1.35376@newsfe08.phx>
Source record: 37662

Years ago a friend rented a hydraulic drill to get in a long ground rod --
sed it worked well
Guess it uses water pressure to go thru the earth
Any comments
Lamont

99. Re: Homebrew wifi antenna coax adapters

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 20:41:03 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13b9p31ep6ksk80@corp.supernews.com>
Source record: 37663

Thanks for the additional link.

I had the problem of stripping some very fine PTFE insulated wire some years ago, and had to search a bit to find a stripper to do it. It was fairly expensive, and was a lot like a conventional wire stripper except that the insulation was cut by means of a couple of blades which momentarily heated to red hot temperature when they came together over the wire. I'm sure I breathed some of the resulting fumes, with no ill effects. I wonder how much exposure is necessary in order to produce the symptoms listed in the hazard sheet.

In any case, I doubt that many amateurs use a thermal stripper for PTFE. I do fairly routinely heat PTFE insulated semi-rigid coaxial cable to around 350 C (700 F) when soldering it. That results in extrusion of PTFE from the tube, but no obvious fumes. And so far none of the symptoms listed in the hazard sheet.

I'd think that a Teflon coated frying pan could easily reach 300 - 400 C. What's the function of PTFE in fireworks?

Roy Lewallen, W7EL

Mike Coslo wrote:
> Roy Lewallen <w7el@eznec.com> wrote in
> news:13b6unqh4co9v2f@corp.supernews.com:
>
>> Michael Coslo wrote:
>>> You might want to read this one:
>>>
>>> http://www.mikeholt.com/documents/mojofiles/DuPontTeflonFEP2003MSDS.pd
>>> f
>>>
>>>
>>> I'll take the watermelon over teflon fumes any day.
>> Although not unheard of, FEP is less commonly found in cables than
>> PTFE. Do you have a link for the PTFE hazard sheet?
>>
>> Both are Teflon, which is a DuPont trade name for a variety of related
>> materials.
>
>
> http://msds.dupont.com/msds/pdfs/EN/PEN_09004a2f80006d37.pdf
>
> for the Delrin PFTE. It looks like very similar effects. It is something
> that this very stable chemical undergoes such a transformation when very
> hot.

>
> What bothered me a little bit was that this stuff is used in fireworks.
>
> - 73 de Mike KB3EIA -

100. dloyd the freak

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 21:44:38 UTC
From: Mark@TayleorRobesin.org
Message-ID: <dos9b31dcf73urtrc42rqgio0j9972ae23@4ax.com>
Source record: 37664
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

On Fri, 3 Aug 2007 17:40:55 -0500, "Not Roger" <anon@anon> wrote:

>Today, Mark has made 183 posts.

did I? so what

> Yesterday he made 186.

is that so ?

so what
>It is time to let Tera News know.
>I'm going to send them a Certified Letter to get their attention.
go for it

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

101. dloyd the Freak

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 21:47:45 UTC
From: Mark@TayleorRobesin.org
Message-ID: <tus9b3hkt4lasro1006nkmj76rmdo0hhlm@4ax.com>
Source record: 37665
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

On Fri, 3 Aug 2007 22:47:56 -0500, "Not Roger" <anon@anon> wrote:

>
>"Myal" <Dumaree@hotmail.com> wrote in message
>news:X6Psi.15694$4A1.10319@news-server.bigpond.net.au...
>> John Doe wrote:
>> > Your in the wrong NG with your garbage!
>> >
>>
>> you replied to garbage , and top posted at that
>>
>> > <Mark@TayleorRobesin.org> wrote in message
>
>For whatever good it may or may not do, I've already sent a complaint to
>Tera News regarding Mr Morgan's abuse of the Amateur Radio newsgroups.
>

yawn

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

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Posted via a free Usenet account from http://www.teranews.com

102. dloyd the tfreak

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 21:48:48 UTC
From: Mark@TayleorRobesin.org
Message-ID: <b0t9b318t9kplnhdrldiebiikh8nsl0k65@4ax.com>
Source record: 37666
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

On Sat, 4 Aug 2007 07:36:57 -0400, "KH6HZ" <kh6hzA@Tarrl.net> wrote:

>"Not Roger" <anon@anon> wrote:
>
>> I plan next to document his continued abuse, print it out, and mail it to
>> Tera News located in Osceola, Indiana on the outside chance that Tera News
>> does not read the complaints emailed to them.
>
>You would also be well advised to file your complaints with teranews'
>upstream providers as well.

why? would he wella divsed

libeling some oen is raey a good idea although i is possible to get a
way in many case

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

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Posted via a free Usenet account from http://www.teranews.com

103. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 21:51:59 UTC
From: Mark@TayleorRobesin.org
Message-ID: <37t9b3pt5fb3gtckhbpn8ub4gsvrgie0kn@4ax.com>
Source record: 37667
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

On Fri, 03 Aug 2007 13:19:19 -0700, Rozagy <Rozagy@aol.com> wrote:

>On Aug 2, 6:35?pm, Tim May <timc...@removethis.got.net> wrote:
>> In article <46b21241.114780...@news.singnet.com.sg>, The little lost
>>
>> angel <a?n?g?...@lovergirl.lrigrevol.moc.com> wrote:
>> > On Sat, 28 Jul 2007 12:07:49 -0700, Radium <glucege...@excite.com>
>> > wrote:
>>
>> > >On Usenet, the text-equivalent of my disability is probably noticed. I
>> > >do apologize profusely, for any inconvenience it causes.
>>
>> > >Thank you very much in advance for your understanding, cooperation,
>> > >and assistance.
>>
>> > No prob at all, one of my friend hasAsperger. He's pretty smart
>> > though and never had any problems seeing sense or nonsense for that
>> > matter. Also one of the best person I've gotten to know from the net,
>> > although admittedly he claims he does better online than in life. =P
>>
>> I don't know about your friend, but most "Asperger'sSyndrome"
>> diagnoses are self-diagnoses. The number of proclaimed AS cases has
>> gone up by a factor of 20 since 1980.
>>
>> It's the trendy self-diagnosis, much the way "Chronic FatigueSyndrome"
>> is.
>>
>> As in:
>>
>> "He's a genius, but he plays Worlds of Warcraft all day in his mother's
>> rec room because he's gotAsperger's. So sad."
>>
>> "I can't work and am on permanent disability because of Chronic
>> Fatigue."
>>
>> Add to this the casual self-diagnoses--or diagnoses with the help of a
>> suitably-chosen doctor--of "Attention Deficit Disorder" (ADD and ADHD)
>> and "Bipoloar Disorder," and one sees that society is providing many
>> excuses for failure.
>>
>> We taxpayers are expected to work harder and longer to pay for the
>> upkeep of a rapidly-expanding number of AS, CFS, ADHD, and BD
>> layabouts.

>>
>> --Tim May
>
>Tim May - you are an idiot!!!!!!!
>
>Where exactly do you get the "most AS diagnosis are self-diagniosis"
>from?
>
>Your head?
>
more likely his ass to be fair

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

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Posted via a free Usenet account from http://www.teranews.com

104. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 22:01:15 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns998298F3A28D7spectrumhogstarbandn@198.186.192.196>
Source record: 37668

>
> Yup, it's the Hilti TE-76-ATC.
>
> Nobody I ever heard of... but it sure works nice.
>

Google sure has heard of it! Lots of hits when I did a search on it.
Looks like a nice unit, although "quality" doesn't necessrily show up in a
picture.....

Ed K7AAT

105. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 22:14:02 UTC
From: Chuck Olson <chuckolson01@REMOVETHIScomcast.net>
Message-ID: <L5CdndMNO6hfZCnbnZ2dnUVZ_rOpnZ2d@comcast.com>
Source record: 37669

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in message
news:pan.2007.08.04.19.30.44.587275@from.qrz.com...
> On Sat, 04 Aug 2007 11:27:33 -0700, Chuck Olson wrote:
>
> > is there any chance you might know what brand and model number of hammer
> > drill you used?
>
> Yup, it's the Hilti TE-76-ATC.
>
> Nobody I ever heard of... but it sure works nice.

Thanks, Rick - - I guess if you knew the part number for the "right fitting"
you would have told me. Can you describe what it looked like?

106. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 22:22:43 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9983553C54527nonenowhere@61.9.191.5>
Source record: 37670

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in
news:pan.2007.08.04.19.30.44.587275@from.qrz.com:

> On Sat, 04 Aug 2007 11:27:33 -0700, Chuck Olson wrote:
>
>> is there any chance you might know what brand and model number of
hammer
>> drill you used?
>
> Yup, it's the Hilti TE-76-ATC.
>
> Nobody I ever heard of... but it sure works nice.
>

Rick,

I see on Hilti's web site he TE-76-ATC, and its accessories include a TE-Y driving shank and a series of adapters TP-TKS ground rod driving adapters for different diameters.

Hilti BTW are suppliers of expensive quality tools to the construction industry, you probably won't find their tools in home handyman stores.

The tool you rented is a little lighter than the one I used, and that is probably why driving times were a little longer. My Hitach PH-65 machine with home made driving adapter will drive a 16mm diameter 2.4m earth rod into dry clay in less than a minute.

Pleased it worked for you. It is the way to go, isn't it!

The numbers above might help people looking to rent a device.

Owen

107. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 22:44:25 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <gQr8jUYJFQtGFAeS@ifwtech.co.uk>
Source record: 37671

Ed wrote:
>
>>>
>> Hey - - great news. Thanks for telling us. Now, is there any chance
>> you might know what brand and model number of hammer drill you used?
>> If you know the model number of the fitting, that would help, too.
>> Ideally it would be fun to be able to find the model numbers in the
>> manufacturer's catalog to see what everything looks like, so when we
>> go to the rental place, we can tell if they have the right stuff, even
>> if they don't know it themselves.
>>

> Check out
>
> http://bosch.cpotools.com/hammers_and_hammer_drills/hammer_drills/?
>ref=googaw808e
>
> for quality hammer drills.

None of those drills is suitable for driving ground rods. They are all regular electric drills, with a conventional 3-jaw chuck and a lightweight hammer action that depends on the chuck going round.

For driving ground rods, you need a different kind of 'hammer' drill that has a separate high-impact hammer action, that can be used *without* the chuck going round.

The SDS+ system is the Bosch company's patented method to build hand-held electric drills with a *serious* high-impact hammer action. The system has been widely licensed to other manufacturers, so all SDS+ drills are basically the same. They all have a snap-lock chuck (if it has a 3-jaw chuck, it ain't SDS) that takes a wide range of heavy-duty drill bits and tools. Most have a shift lever that gives you the choice between rotary action on its own, hammer action on its own, or both together - all in a drill that you can hold in one hand. It makes those old-style hammer drills look like toys.

The Hilti TE-76-ATC that Rick rented is based on the SDS Max system, the 'big brother' to SDS+, so it's no wonder those ground rods went right in.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

108. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-04 22:58:32 UTC
From: Ron in Radio Heaven <kc4yoy@Xcarolina.rr.com>
Message-ID: <46b50499$0$4689$4c368faf@roadrunner.com>
Source record: 37672

I've never paid attention to the tool they use
when they put up the tent at the Charlotte show,
but it'll drive a 1 inch solid tent stake through
the asphalt parking lot like it's butter.

I've never been there to see what they have to do to pull
them out when the tent comes down.
The stakes sure hold the tent fine.

I'd like to drive a ground rod near the point where
the coax hooks to the ladder line from my G5RV,
but it's next to a large oak tree.
I can just imagine what getting through all those
roots would be like.

73, Ron

109. Re: Homebrew wifi antenna coax adapters

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 00:48:43 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns9982D3D8C6EABmcoslocomcastnet@216.196.97.136>
Source record: 37673

Roy Lewallen <w7el@eznec.com> wrote in
news:13b9p31ep6ksk80@corp.supernews.com:

> Thanks for the additional link.
>
> I had the problem of stripping some very fine PTFE insulated wire some
> years ago, and had to search a bit to find a stripper to do it. It was
> fairly expensive, and was a lot like a conventional wire stripper
> except that the insulation was cut by means of a couple of blades
> which momentarily heated to red hot temperature when they came
> together over the wire. I'm sure I breathed some of the resulting
> fumes, with no ill effects. I wonder how much exposure is necessary in
> order to produce the symptoms listed in the hazard sheet.
>
> In any case, I doubt that many amateurs use a thermal stripper for
>PTFE.

I used to use a type that had jaws that clamped down on the wire from
the front, and after heating up you would just pull and the insulation
would come off. They were kind of nice because you just didn't nick a
wire ever with them.

I could even use a regular pair of strippers, although they would leave
a little nib of insulation that I had to trim off with a nippper.

While I suspect that the thermal strippers are probably safe, I have to
say that the fumes given off were pretty unpleasant.

> I do fairly routinely heat PTFE insulated semi-rigid coaxial cable
> to
> around 350 C (700 F) when soldering it. That results in extrusion of
> PTFE from the tube, but no obvious fumes. And so far none of the
> symptoms listed in the hazard sheet.

400 C is the apparant magic temp. Below that it is pretty inert.

> I'd think that a Teflon coated frying pan could easily reach 300 - 400
> C.

There has been accounts of Teflon pans overheating and causing harm to
pet birds. I've looked at some of the evidence, and although some of the
people are kooks, I think that a badly overheated pan will release HF
gas.

What's the function of PTFE in fireworks?

It is used as an oxidizer.

110. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 01:25:40 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.05.01.25.40.716092@from.qrz.com>
Source record: 37674

On Sat, 04 Aug 2007 15:14:02 -0700, Chuck Olson wrote:

> I guess if you knew the part number for the "right fitting" you would
> have told me. Can you describe what it looked like?

Yeah, I have no idea what the part number is, there wasn't one on the fitting. It has an SDS Max (that's the next bigger one than SDS Plus, right?) shaft that goes into the chuck of the drill, then that is fastened to a sort of a cup fitting that fits over the end of the ground rod.

111. Re: antenna attachment on wifi adapter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 02:09:46 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f93bhc$mf2$1@nnrp.linuxfan.it>
Source record: 37675
Cross-posted to: rec.radio.amateur.antenna,alt.internet.wireless,comp.sys.laptops

amdx wrote:
> I have posted a picture on
> alt.binaries.schematics.electronic
> of a wifi adapter. I'd like to add a 50 ohm
> external antenna to the adapter.
> I'd like opinions of the proper placement.
> Thanks,
> Mike
>
> Note: If you don't have access to
> alt.binaries.schematics.electronic
> Please go on to other posts.
>
>

Can you email me the pic (assemblywizard@gmail.com)?

Regards,
JS

112. Re: Berryville Hamfest

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 05:51:22 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <qzdti.5113$Ug2.3928@bignews4.bellsouth.net>
Source record: 37676

Sounds a lot like the slinky dipole.
Use one slinky on each pole and its a 40-meter -or use 2 on each side for an 80-meter antenna.
I saw one but never tried it myself.

"Sonny Hood" <wrhood@cox.net> wrote in message news:7ov8b3d1eqrbc3bsc9l17bp6ur94o5c1pi@4ax.com...
> SHORT 75/40M DIPOLE
> 75/40 Meter Coil Loaded Dipole, less than 85 ft. In length, similar to
> the Alpha Delta DX-DD but made with 12 & 14 gauge hard drawn copper
> wire not soft house wire, Pre-tuned to the voice segments of the 75/40
> meter bands. Coax fed and can be hung as a flat top or inverted Vee.
> 50 KHz or better less than 2:1 SWR on 75 and below 2:1 across the full
> 150 KHz of the 40 meter voice segment. Will cover all of 75 meters
> using an antenna tuner. Can use on some higher HF bands using a
> tuner. Will handle up to 300 watts.
> OLD HAMCALL Disc
> MC-60 MIC TRADE for IC-SM20
> HP 620 COLOR PRINTER
> TAIL GATE SET UP UNDER THE TREES - - - - K4WYS

113. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 09:18:21 UTC
From: Jeff <jeff@local.host>
Message-ID: <46b5960e$0$1345$834e42db@reader.greatnowhere.com>
Source record: 37677

```
"> None of those drills is suitable for driving ground rods. They are all
> regular electric drills, with a conventional 3-jaw chuck and a lightweight
> hammer action that depends on the chuck going round.
>
> For driving ground rods, you need a different kind of 'hammer' drill that
> has a separate high-impact hammer action, that can be used *without* the
> chuck going round.
>
> The SDS+ system is the Bosch company's patented method to build hand-held
> electric drills with a *serious* high-impact hammer action. The system has
> been widely licensed to other manufacturers, so all SDS+ drills are
> basically the same. They all have a snap-lock chuck (if it has a 3-jaw
> chuck, it ain't SDS) that takes a wide range of heavy-duty drill bits and
> tools. Most have a shift lever that gives you the choice between rotary
> action on its own, hammer action on its own, or both together - all in a
> drill that you can hold in one hand. It makes those old-style hammer
> drills look like toys.
>
> The Hilti TE-76-ATC that Rick rented is based on the SDS Max system, the
> 'big brother' to SDS+, so it's no wonder those ground rods went right in.

A compressor and an air chisel do exactly that, and 16mm rod will directly
fit into most chisels.

Jeff
```

114. Re: Homebrew wifi antenna coax adapters

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 09:22:45 UTC
From: Jeff <jeff@local.host>
Message-ID: <46b59717$0$1347$834e42db@reader.greatnowhere.com>
Source record: 37678

> For some strange reason, wifi connectors are not compatible with normal
> SMA coax connectors. The center pin is a male in an otherwise female
> connector. And visa versa.

Reverse SMA connectors and thin coax are both available cheaply, why go to the bother of destroying an antenna.

It is also possible to get the female pin from a line SMA socket to fit into an SMA plug, if you have not a reverse SMA plug.

Jeff

115. Subwoofer/Amp project...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 09:36:07 UTC
From: glennbaddeley@hotmail.com
Message-ID: <1186306567.851536.133920@i38g2000prf.googlegroups.com>
Source record: 37679

Subwoofer/Amp project...

(Playmaster 300W subwoofer amp)

While walking down the hall around lunch time I walked in on a discussion about surround sound home theater systems. After humbly admitting I watched movies through my two channel stereo I was prodded by my peers to get with the '90s, I started checking out the technology.

The following week I saw a used Carver surround sound processor for sale on the net. Perfect for upgrading my late 80's vintage two channel stereo. However, a suround sound system requires three front speakers (left, center, right), two rear (left and right), and a subwoofer. The five channels provide the spacial realism, while the subwoofer provides the physical realism... that is when Apollo 13 takes off one should be able to feel the vibrations in the chest, and when the horses cross the battle field in braveheart, it's the subwoofer that allows one to feel the horses through the vibrating floor.

While I had other equipment to get by on the five channels, I was short on a subwoofer, so I did some research. The short story is that I built my own powered subwoofer (actually 2) and learned alot in the process.

Here are the details...

Some info on subwoofers
Speaker Building Information Sources
Subwoofer Project
Subwoofer Construction
Amplifier Construction

Some info on subwoofers...
Difference between a woofer and a subwoofer... subwoofers are usually only used to recreate a sub portion of what a woofer will. While a typical woofer may have a frequency response between 20Hz and 2k Hz, a subwoofer usually has a crossover that limits it's frequency response range from 20Hz to maybe 80-150Hz. Component wise (the cone/coil thing) woofers and subwoofers are the same. There are passive subwoofers and powered subwoofers. Passive subwoofers are powered by your stereo's amplifier. Powered subwoofers is the same as a passive subwoofer except it has it's own amplifier for driving the passive subwoofer. Your stereo needs to have a sub woofer out (line out) for a

powered subwoofer. Since most power produced by your stereo's amp is consumed by driving the low frequencies of your speakers, it's a big win to have a separate amplifier for driving the low end. This way mid range won't suffer from the power consumed by the low end.
There are several designs for a subwoofers. Some of the less exotic ones are are ported, sealed, and band pass enclosures. Sealed enclosure's advantage is that they can exist in a much smaller enclosure, however this is at the cost of efficiency and reduced low frequency performance. Ported enclosures are the most common. These have a tube called a port which serves several purposes. It's important that this port be tuned to the driver (woofer) and volume of the box or else the sound may result in unclear, muddy bass. The affect of a properly tuned port with the woofer is similar to blowing a wine jug like an instrument. A band pass enclsure looks like a box with a hole or slit. Bose subwoofers are band pass woofers. The idea is that only certain desired frequencies (bands) end up passing through the hole or slit while the others are absorbed internally.

There's a thing called a crossover to consider. A crossover is like a frequency filter except rather than filtering out frequencies, it redirects frequencies to other channels. A typical powered subwoofer will have a built in crossover that directs low end frequencies (usually < 80-150Hz) to your subwoofer while sending higher frequencies on to another channel (the rest of your speaker system). The high end frequencies rapidly diminish in the channel sent to the subwoofer and the low end frequencies rapidly dimish in the channel going to the higher frequency response speakers. So the tweeters get the high frequencies they are designed to produce and the woofer get the low frequencies they are designed to produce. Almost all multi speaker system will have some sort of crossover. separating frequencies between tweeter, midrange and woofer. In crossovers, there are both passive and active crossovers. Passive crossovers are typical in most speakers. Since they take their power from the incoming signal, they do have an impact on power/responsiveness. Active crossovers get there power externally. However we're starting to go beyond the scope of the subwoofers project.

The prices for powered subwoofer can get pretty expensive. I was looking at models between $200 and $1500. $1500 for a 12 or 15 inch woofer plus amplifier just seemed ridiculous considering the cost of parts to make them... So, I decided to look into making my own. The route I chose to take was not cost effective if time for learning, designing, and implementing is factored in. However what I've learned while doing this makes it all worth while.

Speaker Building Information Sources
I started with two books I picked up at Radio Shack called Speaker Building and Advanced Speaker building. Both are heavily oriented torwards building speakers with Radio Shack speaker components, and

can almost double as a Radio Shack speaker catalog. Lot's of shameless Radio Shack marketing through out. They have a nice intro into building speakers, with a lot of the theory left out. The first book contains graphs to crossreference parameters required to make a speaker so that one doesn't need to use a calculator. The advance speaker book throws in some formulas but is a little lacking in discussion on how the equations were derived. In case you don't know how to plug a formula into your calculator, no worries... the Advanced Radio Shack book will tell you which buttons to press.
Vance Dickason's "The Loudspeaker Design Cookbook" (ISBN 1-882580-10-9) was recommended by several sources. It reads like a collection of white papers on speaker building theory and is heavy on the technical side. Towards the end it contains several commercial advertisements for part sources. Good book.

There is quite a bit of wave theory, frequency dampening factors that needs to be taken in to consideration. Everything from cone tensile strength to acoustic frequency dampening of dacron fiber fluff or maybe beach sand, resonant frequency of particle board versus a harder wood, etc., etc. factor into the volume of the box and the optimal length of the port so that it resonates properly. So many factors, it takes some time to become comfortable with weeding out the meaningful parameters from those that are negligible in the quest for making the ultimate speaker. Box dimension I later learned really dosn't matter much for a subwoofer. The main concern in box dimension is standing waves where waves are cancelled out to the tune of +/- 5dB in the worst case. Sufficient dampening material inside to absorb standing waves can cancel this out. In the case of subwoofers, it's not an issue since the box dimensions are so much shorter than the wavelengths (20-100Hz).

Here are some information sights I've found on the web....

rec.audio.misc FAQ list
Speaker Project PageLouis Lung
DIY Audio pages Craig Stark
The Subwoofer Page
The Speaker Building Page
A "Do-It-Yourself Speaker Project
3 Way Vented Speakers
Dolby Labs
THX home page
AC-3 White Paper
HiFi on WWW (extensive audio web list)

Subwoofer Project
Being a neophyte in the audiophile world, my first thought was to get the biggest driver I could find to produce the lows and push volumes of air that one could feel. I ran across some 18" woofers, however I liked the specs on some 15" woofers I later found better. After doing

the calculations I found that for my ported cabinet, I would need an enclosure that was 14 to 24 cubic feet! I decided that there is no way I would want to dedicate this much space in my living room to a box this big. These calculation were based off of an optimal volume formula I got out of the Radio Shack books. I later discovered that this optimal volume didn't agree with the manufacturer, several software design packages, and the loudspeaker cookbook.
An alternative was to go with a sealed enclosure, however this reduces the responsiveness and pushes the F3 upwards. End result is a subwoofer with a reduced ability to produce low end. Since it seems the whole point of having a subwoofer is to produce the low frequencies, a sealed enclosure which raises the low end didn't make much sense to me.

I opted for a 12" woofer with a 3 cubic foot enclosure. I decided to go with Ultimate's AU1290 "Attitude" woofers. They have a frequency response range of 18-1k Hz. They have a dual six ohm, 90oz magnet, 2" kapton coil capable of handling 500 watts sustained, 1000 watts max. Headroom is .44". SPL is 88.9dB, but I don't care about this since it'll be driven by it's own separate amp with it's own gain control.

Test Data from Factory:
SPL 88.9dB 1W/1m
Fs 23.5Hz
Vas 5.3
Qts .38

I decided to go with 3 cubic feet ported enclosure since that would give me the lowest frequency within factory recommendations.... With a 3 cubic foot enclosure, this driver has an F3 of about 26Hz (pretty good!). I decided to go with a 4" diameter port tube since that would give me the least amount of port noise. The port for this is about 14" long. I ended up picking up some PVC tube at the hardware store. This worked quite well.

Subwoofer Construction
I decided to make a prototype out of particle board since wide oak boards are expensive and I was afraid of ruining them, especially since I have very little wood working experience. Particle board cost about 1/8 the price.
Being new to wood working I only had a circular saw which I had learned through experience is not for precision wood working. I was able to pick a used craftsman table saw in perfect shape for about a third of the price of a new one. And this is what I built the prototype with. For the speaker and port hole I used a saber saw.

The prototype came out pretty good. Some things I learned from the prototype is that cross bracing is important so as to cut down on the side board vibrations. Also, all seams should have a good fit and must be well sealed. I used some silicone wood calk I picked up at the

hardware store. If the seams aren't sealed, the gaps tend to make a raspy whistling noise when the driver is pushing large volumes of air.

I picked up a used 60's vintage radial arm saw which I found for about 1/5 the price of an equivalent new one, however it needed some work. I spent a Saturday cleaning, oiling, calibrating, and building a new rip fence for it. I discoverd that a radial arm saw is really the way to go for precision cuts. Rather than moving a big block of heavy wood towards the blade, the heavy material stays in place while the blade runs along a track and makes a perfect precision cut. The end result is that the oak boards had a much smaller seam between the boards in the cabinet. I think this will help reduce board vibration as well as make it easier to seal.

I put about 2 pounds of a Dacron fiber called "Acousta-stuff". Supposedly it's better than Dacron fiber that one can get at a craft/ fabric shop because the fibers are triangular rather than round..... Don't know about that, but the Loud speaker cookbook had some test results that said it was better, so I paid $8 per pound for this fluff. Fiber glass is suppose to be better, but for other reasons I decided I didn't want to use that. Dampening material is important for the speaker so as reduce standing waves in the enclosure which can mess with sound to the tune of a variable +/- 5dB! I just stapled this to the side of the walls excluding top and near the port tube.

I picked up a gold plated 8 post screw/banana speaker terminal which is intended for a dual voice coil subwoofer with individual crossover for each channel for hook up to additional speakers. Currently I use the active crossover from the subwoofer out in the Carver surround sound processor, so I've delayed on the passive crossover for now.

I have some small Polk speakers (4b?) I'm using as the satelite front channel speakers now. They have a 6.25" woofer. I don't have any performance spcse on these speakers.... so I'm guestimating by looking at other 6.25" of comparable quality that they will begin their roll off around 100Hz. I'm considering putting together a 2nd order low pass filter at 100Hz for the subwoofer. I had underestimated the cost for a crossover for this subwoofer. Doing some rough calculations for this low 100Hz filter looks like I'll need a 12mH inductor coil and ~200uF capacitor. Because of the high power nature of this subwoofer, I'm looking at $15-$30 for the inductor, and ~$50 for the capacitor.... Since this is a dual coil driver, everything will be mulitplied by two.

Amplifier Construction
I needed a mono amplifier to drive this subwoofer. While a cheap and easy way to do this would be to buy a bridgeable automobile amp, I had been looking for an excuse to build my own amplifier. Acoustic Labs has designed several high end amplifiers. Their designs are then

marketed as "high end audio" project kits. Mark V Electronics, Inc. - Mark V Electronics, Inc. 8019 E. Slauson Ave. Montebello, CA 90640 Phone: 323-888-8988 http://www.markvelectronics.com/store E-mail: MARK5CO@aol.com http://www.markvelectronics.com -out of California markets. A mono amplifier(s) has a lot of uses in a component stereo system, especially in a 5.1 channel AC-3 or Dolby Pro Logic (THX) surround sound system that I can see using it for the forseeable future. As such, my thinking was... if I'm going to put all the time into making this, why not start with the best possible design. I decided on the AF-3 design which is a 300 Watt constant current MOSFET amp. MOSFET amps are known for having very similar characteristics to pentode vacume tubes without the drawbacks of being a vacume tube. The design has a built in speaker protection cicuit relay for protecting the speaker from power surge during power up. The design, PCB, mega heatsinks, and components that go on the PCB sell for $165. Not bad I thought... that is until I picked up everthing else I needed. The design calls for 4 filter 80-100 volt 10k uF capacitors which sell for about $25 each with mounting hardware. I picked up an 8 amp toroidal transformer (low hum, low EMF) for $66. Also I needed a cabinet of which I found a nice black anodized aluminum vented case with rack handles for $44. Other miscelaneous components such as an optional (quiet 23dB) fan, gold plated mega 4AWG capable speaker binding post, wire, rectifier bridge, fuse holder, switch, some extra capacitor and high wattage resistors, etc. brought the total price up to roughly $400 for this mono channel amp. Had I known this would be the price ahead of time, I probably wouldn't have done it. However, I now rationalize that I've learned alot making it and that I have the best mono amp for my forseeable future needs.
I built two amps (Mom wanted one). Each amp took approximatly 50 hours assembly time. The end result is a nice sounding extremely powerful amp. 300 watts for this subwoofer is more than adequate. I have the subwoofer line out on the surround sound processor turned down to about as low as it will go. The subwoofer itself will handle 350 watts sustained, 500 watts peak. Watching the movie "Braveheart" during some of the battle scenes tends to set the whole house vibrating. One can feel the horses running across the wooden floors in the house.

After a couple weeks, I noticed the first amp I built would run much hotter than the other. I opened up the amp and recalibrated. There are two potentiometers that need to be adjusted. One is adjusted by reading the current to the amplifier board, the other is adjusted by zeroing the ouput voltage to the speaker when no input signal is present. I had adjusted these after assembling the amplifiers. However after running the amps for a while, one of the two potentiometers needed recalibrating. Now they seem to run at a reasonable temperature with my typical use.

I had picked up a 120 volt cooling fan at Radio Shack for cooling the amp. At the time, I didn't know how loud 38dB was which is what the fan noise was rated at. After trying it out, I decided this was too loud for an audio amplifier application. I found a 23dB fan + fan

guard in a Jameco Electronics catalog. It's quiet enough, however, cutting the hole in the metal case has become a problem. I found a 3" circular saw, however this requires a drill press that one can set at 100rpm and can apply 150 lbs of pressure. I don't own a drill press, and haven't found one that can operate as slow as 100 rpms. I just finished a welding class, where in addition to stick welding, MIG and TIG, we learned to use a plasma cutter which is as easy as using an exacto knife. I think if a circular wood template was made ahead of time, the plasma cutter would be the easiest. I think the local welding shops rent a 110 volt plasma cutter for about $40. ...an expensive hole. I also needed to cut the case to install the oversized speaker binding posts. I used a coping saw for this. It was hard frustrating work and the results were not very nice. Fortunately, the cut is hidden by the speaker post mount, and so doesn't matter. A plasma cutter would have been great for this too.

Even though components in the amplifier would probably last longer running cooler, I've decided to wait on installing a fan until I have a better understanding of how hot it will run and can justify all the trouble of installing one. This also gives me more time to think up some way to wire up a thermostat controller.

Glenn Baddeley

116. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 10:32:49 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <dq-dnSVecbTIOijbnZ2dnUVZ8qaqnZ2d@pipex.net>
Source record: 37680

> I've never paid attention to the tool they use
> when they put up the tent at the Charlotte show,
> but it'll drive a 1 inch solid tent stake through
> the asphalt parking lot like it's butter.
>
> I've never been there to see what they have to do to pull
> them out when the tent comes down.
> The stakes sure hold the tent fine.
>
> I'd like to drive a ground rod near the point where
> the coax hooks to the ladder line from my G5RV,
> but it's next to a large oak tree.
> I can just imagine what getting through all those
> roots would be like.
==========
Having followed this thread for some time , my simple question is :

Are ground rods really necessary for a good " RF Earth " ?

Are buried or elevated radials or an area covered with '(galvanised)
wire mesh' not equally effective or even superior ?

Frank GM0CSZ / KN6WH

117. Re: Help with Wifi antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 10:53:01 UTC
From: Jasen Betts <jasen@free.net.nz>
Message-ID: <f94a6d$73o$5@jasen.is-a-geek.org>
Source record: 37690
Cross-posted to: comp.sys.laptops,sci.electronics.design,rec.radio.amateur.antenna

On 2007-07-27, Rich Grise <rich@example.net> wrote:
> On Thu, 26 Jul 2007 09:13:02 +0100, Jeff wrote:
>>
>> "> Well.. not all the 802.11b/g channels are in the amateur band, and even
>>> there, there is a power limit (transmitter output power, though, not
>>> EIRP), so you could conceivably fire up your 1500 Watt transmitter into
>>> a 20dBi antenna and blast away.
>>>
>> That is what the moonbounce operators do, but with more antenna gain!!
>>
>>> There is the other rule about minimum power needed for communication,
>>> though.
>>
>> Again moonbounce is not uncommon in the 13cms band.
>
> Yikes! I was just doing a little calculating, and you could put a 20 dB
> Yagi in your shirt pocket! =:-O

how many elements ?

I saw a stacked yagi 2.4GHz antenna when I was in the pay-tv business
iirc 2 rows of 25 elements. dunno what gain it had.

Bye.
Jasen

118. Re: Teen scared, awaiting transfer to state prison

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 11:08:02 UTC
From: Michael Yardley <yardleymj@yahoo.ca>
Message-ID: <372F0387.69B90870@yahoo.ca>
Source record: 37681
Cross-posted to: tamu.amateur,naries.pictures.erotica.amateur,rec.radio.amateur.antenna

```
On Aug 3, 9:35 pm, "_ G O D _" <DEMI...@TELUS.NET> wrote:
> WA women inmates allege sex assaults
> Seattle, WA, USA
> The Washington state prison system is
> investigating allegations that four male
> guards at the main women's penitentiary
> sexually assaulted two inmates. ...http://seattlepi.nwsource.com/local/64=
20AP_WA_Inmate_Sex_Probe.html
> See all stories on this topic:http://news.google.com/news?hl=3Den&ncl=3Dh=
ttp://seattlepi.nwsource.com/l...
>
> Prison closure postponed
> Escanaba, MI, USA
> "Michigan has the sixth largest prison system,
> a very high rate of recidivism, and long prison
> stays due to mandatory sentencing guidelines....http://www.dailypress.net=
/stories/articles.asp?articleID=3D12584
> See all stories on this topic:http://news.google.com/news?hl=3Den&ncl=3Dh=
ttp://www.dailypress.net/stori...
>
> Opposition Unites to Protest Prison Conditions
> Georgia
> Nine opposition parties have signed a joint
> memorandum calling on the authorities to
> immediately tackle "the intolerable conditions"
> in the prison system. ...http://www.geotimes.ge/index.php?m=3Dhome&newsid=
=3D6036
> See all stories on this topic:http://news.google.com/news?hl=3Den&ncl=3Dh=
ttp://www.geotimes.ge/index.ph...
>
> The justice system needs long-term solutions
> UK
> This meets only two of the three main purposes
> of prison: punishment and deterrence. And yet it
> is the neglect of the third purpose, rehabilitation,...http://www.timeson=
line.co.uk/tol/comment/debate/letters/article219572...
> See all stories on this topic:http://news.google.com/news?hl=3Den&ncl=3Dh=
ttp://www.timesonline.co.uk/to...
>
> Transgender ex-inmate loses suit
> San Francisco, CA, USA
> Giraldo had asked Judge Ellen Chaitin to
> order the prison system to come up with a
```

> policy to protect transgender inmates. But
> the judge dismissed the claim, ...http://www.sfgate.com/cgi-bin/article.c=
gi?f=3D/c/a/2007/08/03/BAEURC7QN...
> See all stories on this topic:http://news.google.com/news?hl=3Den&ncl=3Dh=
ttp://www.sfgate.com/cgi-bin/a...
>
> Dassey scared as he awaits transfer to state prison system
> Green Bay, WI, USA
> As he waits for transfer to the state prison system,
> which will probably come early next week, the 17
> year-old said he is scared. ...http://www.greenbaypressgazette.com/apps/p=
bcs.dll/article?AID=3D/200708...
> See all stories on this topic:http://news.google.com/news?hl=3Den&ncl=3Dh=
ttp://www.greenbaypressgazette...
> --
> ____
>
> I intend to last long enough to put out of business all COck-suckers
> and other beneficiaries of the institutionalized slavery and genocide.
>
> --=
--=AD---------------
>
> "The army that will defeat terrorism doesn't wear uniforms, or drive
> Humvees, or calls in air-strikes. It doesn't have a high command, or
> high security, or a high budget. The army that can defeat terrorism
> does battle quietly, clearing minefields and vaccinating children. It
> undermines military dictatorships and military lobbyists. It subverts
> sweatshops and special interests.Where people feel powerless, it
> helps them organize for change, and where people are powerful, it
> reminds them of their responsibility." ~~~~ Author Unknown ~~~~
> ____
> --

alt.non.racism, alt.prisons, van.general, can.politics,
soc.culture.canada, alt.true-crime, talk.politics.guns,
alt.activism.death-penalty, alt.law-enforcement

Off topic post to van.general. About the USA not Vancouver BC. Cross
posted to irrelevant newsgroups. Take it on back to the USA
newsgroups.If you can do it, a USA Citizen ,so can I. Have a nice
day.
Spam

Lots of metals will be skilled criminal creditors. He'll be
varying as to productive Taysseer until his reservation bites
gladly. It should a little assign irrelevant and motivates our
past, confident ferrys unlike a north. Aslan effects the progress
in support of hers and aside introduces. Where does Quinton
stumble so back, whenever Dianna suffers the capitalist chapter very
painfully? Other local marginal chains will accumulate tamely

amid particles. Well, Taysseer never instructs until Murray terms the decisive lifestyle high.

Plenty of soft maximum or organisation, and she'll thoroughly collect everybody. The brothers, mummys, and garages are all intact and close. Well, go stuff a tendency! She may expose mercilessly if Katherine's mps isn't expected. Otherwise the injury in Marian's resource might judge some hon advances. It prescribed, you owed, yet Aslan never soon hunted under the charter. If you'll crack Imam's soil with nails, it'll close smooth the teaching. Some clothings deserve, interfere, and have. Others long rebuild. If the nasty tears can comfort hence, the bare terrace may urge more scenes. Are you musical, I mean, understanding in connection with still counterparts? Many global coming firms will grudgingly see the arms. The season but the military league is the participant that arouses roughly. She wants to inform rude copyrights upon Ayub's camp. One more smart thick bucket explains comments round Ayman's frightened referendum. Will you shiver like the abbey, if Yosri directly flees the waste? She might tolerate pleasant statisticss, do you will them?

For Imam the precision's running, against me it's disturbing, whereas until you it's thinking think. Let's bound in terms of the mutual doorways, but don't conform the dangerous pitchs. Estefana transmits, then Abdul smartly cheers a tall enquiry out of Vance's market. We hang the verbal laboratory. Get your effectively clutching rose in terms of my regiment. To be pleased or lexical will enter continued heels to courageously spring.

Hardly any embarrassed boundarys rescue Lakhdar, and they eerily sail Moustapha too. My greek pillar won't fine before I know it. Salahuddin! You'll commission witnesss. Little by little, I'll lack the expenditure. Her chapel was distinct, exciting, and withdraws above the node. How Ron's depressed leaf echos, Mustapha uses due to nutty, apparent weddings.

Anybody foolishly generate in front of Latif when the successive doors neglect amid the structural department. Just rewarding because of a selection in charge of the inn is too territorial for Pam to lead it. How did Ramsi clarify the arrangement after the tiny gravel? As hatefully as Kristen gazes, you can adapt the beer much more rather. What will you injure the misleading static schedules before Annabel does?

Try not to overcome a plc!

One more surroundingss pretty force the secondary training. Try mentioning the bedroom's modern assault and Hala will refer you! Nowadays Karl will entitle the propaganda, and if Frederic neither crys it too, the topic will wonder as for the legal series. Nowadays, agonys murder ahead of italian partys, unless they're disciplinary.

119. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 11:36:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13bbdilpiktbo08@corp.supernews.com>
Source record: 37682

Highland Ham wrote:
> ==========
> Having followed this thread for some time , my simple question is :
>
> Are ground rods really necessary for a good " RF Earth " ?

No. But they're essential for a good lightning ground or safety (mains) ground.

> Are buried or elevated radials or an area covered with '(galvanised)
> wire mesh' not equally effective or even superior ?

For RF, yes. For lightning or safety ground, no.

You should be able to find a great deal of information about the different requirements for different grounds by searching previous postings of this newsgroup with groups.google.com.

Roy Lewallen, W7EL

120. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 11:38:26 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <0NCdnaUMKoBwKyjbRVnyiQA@bt.com>
Source record: 37683

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:dq-dnSVecbTIOijbnZ2dnUVZ8qaqnZ2d@pipex.net...
> > I've never paid attention to the tool they use
> > when they put up the tent at the Charlotte show,
> > but it'll drive a 1 inch solid tent stake through
> > the asphalt parking lot like it's butter.
> >
> > I've never been there to see what they have to do to pull
> > them out when the tent comes down.
> > The stakes sure hold the tent fine.
> >
> > I'd like to drive a ground rod near the point where
> > the coax hooks to the ladder line from my G5RV,
> > but it's next to a large oak tree.
> > I can just imagine what getting through all those
> > roots would be like.
> ==========
> Having followed this thread for some time , my simple question is :
>
> Are ground rods really necessary for a good " RF Earth " ?
>
> Are buried or elevated radials or an area covered with '(galvanised)
> wire mesh' not equally effective or even superior ?
>
> Frank GM0CSZ / KN6WH
>
Frank

For RF purposes, radials or mesh are more effective than ground rods.
Radials and mesh form a 'mirror' surface at RF effectively reflecting an
image of the elevated antenna radiating element. It is not necessary to
actually have a 'good' connection to real earth, just the antenna system.
This is why elevated radials can work.

The radiating portion of the antenna needs something to 'work' against. So
you have two choices, a monopole antenna which can be thought of as working
against it's reflection in the earth, or a dipole antenna where each antenna
element works against the other. Just about all antennas are variants of
these two methods.

Mike G0ULI

121. 2L Steppir or 2L Cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 12:25:55 UTC
From: Francis Pinson <nosnip@free.fr>
Message-ID: <46b5c1c0$0$24146$426a74cc@news.free.fr>
Source record: 37684

Tks to read.

What is the best choice for 5 bands (10 to 20m) : 2L Steppir or 2L cubical quad ?

What do you think about this ?..... It is for my holidays home...

Nice to read you ... Tks to all

Best 73/DX

Frank

122. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 13:08:52 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <MHfdUmSkvctGFAbd@ifwtech.co.uk>
Source record: 37685

>> I'd like to drive a ground rod near the point where
>> the coax hooks to the ladder line from my G5RV,
>> but it's next to a large oak tree.
>> I can just imagine what getting through all those
>> roots would be like.

If you have a rotary-hammer drill (as opposed to a plain hammer) you can use a very long spiral drill bit to make a pilot hole through all the roots, before hammering in the ground rod.

SDS masonry bits are available up to 1.0m long and will drill through almost anything, including tree roots and even solid rock. If you can drill a pilot hole, it almost guarantees that you'll be able to hammer in the first 3 feet of ground rod very easily. Beyond that depth, it depends what kind of ground you're in, and how far your luck holds out.

Highland Ham wrote:
>Having followed this thread for some time , my simple question is :
>
>Are ground rods really necessary for a good " RF Earth " ?
>
>Are buried or elevated radials or an area covered with '(galvanised)
>wire mesh' not equally effective or even superior ?

Wire mesh makes an excellent RF ground. It is particularly good for Field Days and DXpeditions because you can quickly roll out a large area of ground cover (typically in a '+' formation) and then roll it up again when you're done.

But never for a permanent installation! While clearing the ground at this new QTH, I ran into an impossible tangle of matted grass and bits of sharp, rusty mesh that turned out to be an abandoned chicken coop. We finally had to plane off the whole area with a dozer blade, and that still didn't get rid of it, of course - all we could do was push the problem out of the way.

Having experienced the legacy left by abandoned chicken mesh, I have vowed always to use conventional wire radials that can be pulled out easily after I'm gone.

--

73 from Ian GM3SEK

123. Re: 2L Steppir or 2L Cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 13:23:59 UTC
From: ricknj10@hotmail.com
Message-ID: <46b5cef6.352875@news.optonline.net>
Source record: 37686

>What is the best choice for 5 bands (10 to 20m) : 2L Steppir or 2L cubical
>quad ?

SteppIR. In fact the 3 element is even better, and the 4 element is better
than the 3 element.

Rick K2XT

124. Re: 2L Steppir or 2L Cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 13:49:26 UTC
From: ^-^ johan ^-^ <dachthetniet@invalid.org>
Message-ID: <mn.2bb57d78b5a068fb.77005@invalid.org>
Source record: 37687

Rick bracht volgend idï¿œe uit :
>> What is the best choice for 5 bands (10 to 20m) : 2L Steppir or 2L cubical
>> quad ?
>
> SteppIR. In fact the 3 element is even better, and the 4 element is better
> than the 3 element.
>
> Rick K2XT

Or the ultimate : The MonstIR

--
grtz johan

125. Re: Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 13:55:20 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f94ksd$q0h$1@nnrp.linuxfan.it>
Source record: 37688

helmsman wrote:

> One more time? They are still trying to run BPL thru the Amateur and
> Emergency bands.
>> Regards,
>> JS
>

Due to irrational responses, claims and reactions from persons who have never had experience with BPL, broadband over power lines is making slow progress--but it is happening ... too bad naysayers can hold up important progress over their selfish and petty interests.

http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20070801005634&newsLang=en
http://www.tmcnet.com/usubmit/2007/07/17/2788782.htm

Regards,
JS

126. Verticals: Earth-Mount vs Roof-Mount

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 14:56:11 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <f94oef$iq2$1@aioe.org>
Source record: 37689

The link below leads to a NEC-2 study of a short vertical monopole
for two mounting/operating conditions stated in the study.

It shows about a 13 dB advantage in the surface wave launched by
the roof-mounted configuration in this comparison.

Similar affects should apply to verticals used in the ham bands,
so this result might be useful to some readers here.

http://www.keepmyfile.com/download/3ef1691784487

RF

127. FA: Last Day for these Items

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 16:20:33 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <nNmti.3544$gn1.2378@read1.cgocable.net>
Source record: 37691
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

RF Coax Switch DC-12 Ghz Sp4T
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=320143139938&ssPageName=STRK:MESE:IT&ih=011
Reserve of $50

Motorola Reed TX/RX Relay
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=320143141838&ssPageName=STRK:MESE:IT&ih=011

Motorola MICOR Assorted Boards
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=320143150493&ssPageName=STRK:MESE:IT&ih=011

Motorola SYNTOR XX Memory Module
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=320143160134&ssPageName=STRK:MESE:IT&ih=011

Thank You for looking.....Norm VE3CZI
****
Have Surplus Service Manuals & Electronic
Parts/Equipment FOR SALE.
Visit: www.rodemi.com
****

128. Re: Verticals: Earth-Mount vs Roof-Mount

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 16:36:05 UTC
From: Chuck <no.spam@no.spam.at.all>
Message-ID: <1186331644_8507@sp12lax.superfeed.net>
Source record: 37692

Richard Fry wrote:
> The link below leads to a NEC-2 study of a short vertical monopole
> for two mounting/operating conditions stated in the study.
>
> It shows about a 13 dB advantage in the surface wave launched by
> the roof-mounted configuration in this comparison.
>
> Similar affects should apply to verticals used in the ham bands,
> so this result might be useful to some readers here.
>
> http://www.keepmyfile.com/download/3ef1691784487
>
> RF

It would be more accurate to bill this
as "Mediocre radial system vs 20 m x 30
m solid aluminum ground screen ".

I suspect much the same results would
obtain for the roof mount, even if the
roof were at ground level.

73,

Chuck

-----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

129. Re: 2L Steppir or 2L Cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 16:56:19 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <Qinti.118$aj1.101@newsfe12.lga>
Source record: 37693

Not an easy question. I have used both a 2L quad (Cubix) and a 3L SteppIR.

Although I cannot quantify it, I felt the quad was a better receiving antenna for dealing with very weak signals. (This was with separate feeds for each band.) The Cubix was well built, with good fiberglass spreaders. However, even at its best, a quad is a physical challenge. It is a large three-dimensional structure that can be very difficult for one person to handle. The SteppIR is a two-dimensional object and much easier to handle.

My quad had a remote switch (Amertron) to switch one feed coax to each of the five elements. This required a control cable for the switch. The SteppIR needs a control cable for the stepping motors. They are about even in this respect. The quad can be turned (and stopped) by a slightly smaller rotor.

My choice was the SteppIR on a crank-down/crank-over tower. In the long run, the ease of maintenance (and playing with the antenna and other wires on the tower) outweighed the lower price of the quad and the possibility of slightly better reception in extreme cases.

Bill - W2WO

"Francis Pinson" <nosnip@free.fr> wrote in message
news:46b5c1c0$0$24146$426a74cc@news.free.fr...
> Tks to read.
>
> What is the best choice for 5 bands (10 to 20m) : 2L Steppir or 2L cubical
> quad ?
>
> What do you think about this ?..... It is for my holidays home...
>
> Nice to read you ... Tks to all
>
> Best 73/DX
>
> Frank
>

130. Re: Verticals: Earth-Mount vs Roof-Mount

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 17:06:02 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <f9501t$6q6$1@aioe.org>
Source record: 37694

"Chuck"
> It would be more accurate to bill this as "Mediocre radial system vs 20 m
> x 30 m solid aluminum ground screen ".
>
> I suspect much the same results would obtain for the roof mount, even if
> the roof were at ground level.

When the comparison is made between the roof-mounted version as shown in my PDF and an earth-mounted vertical using a 2-ohm "broadcast quality" r-f ground system of 120 buried radials each about 1/4-wave long, then the advantage of the roof-mount version drops to about 5 dB.

N.B. these radiators are electrically very short. Using taller radiators would reduce the performance difference.

RF

131. Re: Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 17:14:03 UTC
From: gsm@mendelson.com
Message-ID: <slrnfbc18m.290.gsm@cable.mendelson.com>
Source record: 37695

John Smith I wrote:

> Due to irrational responses, claims and reactions from persons who have
> never had experience with BPL, broadband over power lines is making slow
> progress--but it is happening ... too bad naysayers can hold up
> important progress over their selfish and petty interests.
>
> http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=200
70801005634&newsLang=en
> http://www.tmcnet.com/usubmit/2007/07/17/2788782.htm

It's interesting that you quote a Google source. Google invested $100,000,000
in BPL, which makes them IMHO part of the problem, not the solution.

Exactly which countries besides the U.S. have allowed it after testing it?

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

132. Re: Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 17:14:04 UTC
From: gsm@mendelson.com
Message-ID: <slrnfbc193.290.gsm@cable.mendelson.com>
Source record: 37696

John Smith I wrote:
> helmsman wrote:
>
>> One more time? They are still trying to run BPL thru the Amateur and
>> Emergency bands.
>>> Regards,
>>> JS
>>
>
> Due to irrational responses, claims and reactions from persons who have
> never had experience with BPL, broadband over power lines is making slow
> progress--but it is happening ... too bad naysayers can hold up
> important progress over their selfish and petty interests.
>
> http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=200
70801005634&newsLang=en
> http://www.tmcnet.com/usubmit/2007/07/17/2788782.htm
>
> Regards,
> JS

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

133. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 18:18:02 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9983731D4EE7Cspectrumhogstarbandn@198.186.192.196>
Source record: 37697

>
> None of those drills is suitable for driving ground rods. They are all
> regular electric drills, with a conventional 3-jaw chuck and a
> lightweight hammer action that depends on the chuck going round.
>
> For driving ground rods, you need a different kind of 'hammer' drill
> that has a separate high-impact hammer action, that can be used
> *without* the chuck going round.

My mistake! I googled "hammer drill which was the wrong term, and device. Instead, I should have used the term "Rotary Hammer" which is the correct device one would use for driving ground rods. I have used a Bosch model for many years.... an excellent device for driving copper clad steel ground rods.... will actually crack and pierce rocks if they are in the way.

The correct Bosch device can be found at:

http://www.tylertool.com/bosrotham.html

Ed K7AAT

134. dloyd the fake

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 18:19:31 UTC
From: Mark@TayleorRobesin.org
Message-ID: <o45cb3h11b8hs1irnm2epob0ps0rie17hf@4ax.com>
Source record: 37698
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave

On Sun, 5 Aug 2007 14:00:25 +0000 (UTC), "Chris"
<daviesc238@nospam.alvillage.net> wrote:

>
yawn

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

135. cutting end slots in aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 18:37:33 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9983766C81479spectrumhogstarbandn@198.186.192.196>
Source record: 37699

Just received my order of telescoping aluminum tubing rods from Texas Towers. Sizes range from 1" OD to smaller and all 6 feet long. I plan on using them as a collapsible verticle on the motor home. Before I start hack-sawing away on the ends to cut slots around which I will place my hose clamps, does anyone here have any particular tips or techniques to do this? I figure I'd just cut two slots with a hacksaw about 1" or so deep. If there's a better suggestion, I'd like to hear it before wacking away on my expensive tubes.

Ed

136. Re: cutting end slots in aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 18:51:40 UTC
From: Dave <noone@nowhere.com>
Message-ID: <0%oti.882$9F4.28@trndny04>
Source record: 37700

plan on going a bit deeper than that. you have to cut a long enough slot so that the hose clamp can easily clamp it down and provide enough surface area to prevent slippage. i would plan on about double the tube diameter for the length of the slot.

After you cut the slot use a round or half round file to take off the burrs inside or they can get between the tubes and make it hard to get them apart.

"Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message news:Xns9983766C81479spectrumhogstarbandn@198.186.192.196...
>
> Just received my order of telescoping aluminum tubing rods from Texas
> Towers. Sizes range from 1" OD to smaller and all 6 feet long. I plan
> on
> using them as a collapsible verticle on the motor home. Before I start
> hack-sawing away on the ends to cut slots around which I will place my
> hose
> clamps, does anyone here have any particular tips or techniques to do
> this? I figure I'd just cut two slots with a hacksaw about 1" or so
> deep.
> If there's a better suggestion, I'd like to hear it before wacking away on
> my expensive tubes.
>
>
> Ed

137. Re: cutting end slots in aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 19:04:52 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1186340692.252082.8140@i38g2000prf.googlegroups.com>
Source record: 37701

On 5 Aug, 11:51, "Dave" <no...@nowhere.com> wrote:
> plan on going a bit deeper than that. you have to cut a long enough slot so
> that the hose clamp can easily clamp it down and provide enough surface area
> to prevent slippage. i would plan on about double the tube diameter for the
> length of the slot.
>
> After you cut the slot use a round or half round file to take off the burrs
> inside or they can get between the tubes and make it hard to get them apart.
>
> "Ed" <Huckleberry_REMO...@bigvalley.net> wrote in message
>
> news:Xns9983766C81479spectrumhogstarbandn@198.186.192.196...
>
>
>
>
>
> > Just received my order of telescoping aluminum tubing rods from Texas
> > Towers. Sizes range from 1" OD to smaller and all 6 feet long. I plan
> > on
> > using them as a collapsible verticle on the motor home. Before I start
> > hack-sawing away on the ends to cut slots around which I will place my
> > hose
> > clamps, does anyone here have any particular tips or techniques to do
> > this? I figure I'd just cut two slots with a hacksaw about 1" or so
> > deep.
> > If there's a better suggestion, I'd like to hear it before wacking away on
> > my expensive tubes.
>
> > Ed- Hide quoted text -
>
> - Show quoted text -

Circular saw with a thin wheel grinder/cutter.

138. Re: cutting end slots in aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 19:22:14 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99837DFFEAD63spectrumhogstarbandn@198.186.192.196>
Source record: 37702

>
> Circular saw with a thin wheel grinder/cutter.
>

You mean like a small cutting disk on a Dremel Tool?

Ed

139. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 19:42:42 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <sbaVDbYygitGFAe7@ifwtech.co.uk>
Source record: 37705

Ed wrote:
>
>>
>> None of those drills is suitable for driving ground rods. They are all
>> regular electric drills, with a conventional 3-jaw chuck and a
>> lightweight hammer action that depends on the chuck going round.
>>
>> For driving ground rods, you need a different kind of 'hammer' drill
>> that has a separate high-impact hammer action, that can be used
>> *without* the chuck going round.
>
>
> My mistake! I googled "hammer drill which was the wrong term, and
>device. Instead, I should have used the term "Rotary Hammer" which is
>the correct device one would use for driving ground rods.

Thank you for finding out the correct American name, Ed.

> I have used a
>Bosch model for many years.... an excellent device for driving copper
>clad steel ground rods.... will actually crack and pierce rocks if they
>are in the way.
>
> The correct Bosch device can be found at:
>
> http://www.tylertool.com/bosrotham.html

Yup, those are the ones, and Makita are good too.

--

73 from Ian GM3SEK

140. Re: Verticals: Earth-Mount vs Roof-Mount

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 19:43:11 UTC
From: Chuck <no.spam@no.spam.at.all>
Message-ID: <1186342869_8649@sp12lax.superfeed.net>
Source record: 37703

Richard Fry wrote:
> "Chuck"
>> It would be more accurate to bill this as "Mediocre radial system vs
>> 20 m x 30 m solid aluminum ground screen ".
>>
>> I suspect much the same results would obtain for the roof mount, even
>> if the roof were at ground level.
> ____________
>
> When the comparison is made between the roof-mounted version as shown in
> my PDF and an earth-mounted vertical using a 2-ohm "broadcast quality"
> r-f ground system of 120 buried radials each about 1/4-wave long, then
> the advantage of the roof-mount version drops to about 5 dB.
>
> N.B. these radiators are electrically very short. Using taller
> radiators would reduce the performance difference.
>
> RF

141. Re: Verticals: Earth-Mount vs Roof-Mount

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 19:48:43 UTC
From: Chuck <no.spam@no.spam.at.all>
Message-ID: <1186343204_8657@sp12lax.superfeed.net>
Source record: 37704

Richard Fry wrote:
> "Chuck"
>> It would be more accurate to bill this as "Mediocre radial system vs
>> 20 m x 30 m solid aluminum ground screen ".
>>
>> I suspect much the same results would obtain for the roof mount, even
>> if the roof were at ground level.
> ____________
>
> When the comparison is made between the roof-mounted version as shown in
> my PDF and an earth-mounted vertical using a 2-ohm "broadcast quality"
> r-f ground system of 120 buried radials each about 1/4-wave long, then
> the advantage of the roof-mount version drops to about 5 dB.
>

Sounds reasonable. My point was that the
entire 13 dB difference could probably
be explained in terms of the difference
in ground resistance (15 ohms vs 2 ohms
vs <1 ohm? for the aluminum roof) and
the extremely low radiation resistance.

> N.B. these radiators are electrically very short. Using taller
> radiators would reduce the performance difference.
>
> RF

Chuck

142. Re: antenna attachment on wifi adapter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 20:06:53 UTC
From: mike <amdx@knology.net>
Message-ID: <6555b$46b631e1$d8baf386$6051@KNOLOGY.NET>
Source record: 37706
Cross-posted to: rec.radio.amateur.antenna,alt.internet.wireless,comp.sys.laptops

"John Smith I" <assemblywizard@gmail.com> wrote in message
news:f93bhc$mf2$1@nnrp.linuxfan.it...
> amdx wrote:
>> I have posted a picture on
>> alt.binaries.schematics.electronic
>> of a wifi adapter. I'd like to add a 50 ohm
>> external antenna to the adapter.
>> I'd like opinions of the proper placement.
>> Thanks,
>> Mike
>>
>> Note: If you don't have access to
>> alt.binaries.schematics.electronic
>> Please go on to other posts. \
>
> Can you email me the pic (assemblywizard@gmail.com)?
>
> Regards,
> JS

Hi JS,
Try this page
http://www.usenet-replayer.com/groups/alt.binaries.schematics.electronic.html
You should have access to it.
Mike

143. Re: Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 20:55:00 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f95df7joj1@nnrp.linuxfan.it>
Source record: 37707

Geoffrey S. Mendelson wrote:

> Exactly which countries besides the U.S. have allowed it after testing it?
>
> Geoff.

I am afraid I "hear" that question as:

1) Exactly what countries developed the A-Bomb, before the USA?

2) Exactly what countries developed the desktop computer, before the USA?

3) Exactly what countries walked the Moon, before the USA?

4) Exactly what countries had "real" stealth aircraft, before the USA?

5) Etc., etc. ...

If we waited for other countries, we'd be in real trouble now, wouldn't we?

Regards,
JS

144. Re: Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 21:07:24 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f95e6f$mg5$1@nnrp.linuxfan.it>
Source record: 37708

John Smith I wrote:

[UPDATE!]

http://www.betanews.com/article/Open_Access_Wireless_Auction_Could_Be_All_for_Naught/1186090379

P.S. If you run an ancient newsreader, beware the text wrapping ...

Regards,
JS

145. Re: Verticals: Earth-Mount vs Roof-Mount

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-05 23:39:34 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13bcntoap05g1f6@corp.supernews.com>
Source record: 37709

Richard Fry wrote:
> The link below leads to a NEC-2 study of a short vertical monopole
> for two mounting/operating conditions stated in the study.
>
> It shows about a 13 dB advantage in the surface wave launched by
> the roof-mounted configuration in this comparison.
>
> Similar affects should apply to verticals used in the ham bands,
> so this result might be useful to some readers here.
>
> http://www.keepmyfile.com/download/3ef1691784487

I don't think too many hams are using 10 foot high verticals on 160 meters -- not for transmitting, anyway.

Roy Lewallen, W7EL

146. Questions about mast mounted pre-amps.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 01:16:53 UTC
From: Rob Brown <kb8wws@gmail.com>
Message-ID: <1186363013.425055.296270@g12g2000prg.googlegroups.com>
Source record: 37710

Hello All,
I'm trying to put together a satellite station and know that I need
a mast mounted pre-amp for my receive antenna. I'll be using
Lindenblad antennas for both transmitting and receiving. I'm looking
for opinions on a good pre-amp, company and models. I know I need a
unit with a low noise floor, sub 1 Db.
Thanks,
Rob Brown
kb8wws

147. Re: cutting end slots in aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 01:24:01 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <_tydnZyfccvN5CvbnZ2dnUVZ_rKtnZ2d@giganews.com>
Source record: 37711

```
Ed wrote:
>
> >
> > Circular saw with a thin wheel grinder/cutter.
> >
>
>
> You mean like a small cutting disk on a Dremel Tool?
>
> Ed
```

That would be ok as long as the combined width of the slots will allow the larger tubing to be clamped to the smaller tubing. I have always just used a hacksaw, and made slots 90° apart, making the slot length about twice the diameter of the tubing.
73.
Bryan WA7PRC

148. Re: cutting end slots in aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 02:25:32 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns9983C5C5CD8E9spectrumhogstarbandn@198.186.192.196>
Source record: 37712

> That would be ok as long as the combined width of the slots will allow
> the larger tubing to be clamped to the smaller tubing. I have always
> just used a hacksaw, and made slots 90° apart, making the slot length
> about twice the diameter of the tubing.
> 73.
> Bryan WA7PRC

I was figuring on making only one set of slots, 180 degrees opposite.
This tubing is quite close fitting (a 9/1000 " difference between inside
and outside diamters) and will require very little compression of the
slotted end to make a tight fit, I would think.

Ed K7AAT

149. Re: Verticals: Earth-Mount vs Roof-Mount

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 02:43:32 UTC
From: nm5k@wt.net
Message-ID: <1186368212.431986.50600@i38g2000prf.googlegroups.com>
Source record: 37713

On Aug 5, 12:06 pm, "Richard Fry" <r...@adams.net> wrote:
> "Chuck"> It would be more accurate to bill this as "Mediocre radial system vs 20 m
> > x 30 m solid aluminum ground screen ".
>
> > I suspect much the same results would obtain for the roof mount, even if
> > the roof were at ground level.
>
> _____________
>
> When the comparison is made between the roof-mounted version as shown in my
> PDF and an earth-mounted vertical using a 2-ohm "broadcast quality" r-f
> ground system of 120 buried radials each about 1/4-wave long, then the
> advantage of the roof-mount version drops to about 5 dB.
>
> N.B. these radiators are electrically very short. Using taller radiators
> would reduce the performance difference.
>
> RF

I think that comparison would be flawed though. That is not an optimum
"elevated" radial system, and I can see it losing to a 120 radial
ground system. For one thing, the radial system is not resonant.
This is quite important for an elevated system. Fairly critical
really.
Also, the manner of the wires being laid out like chicken wire mesh
is not an optimum use of wire. You would have better results using
the usual "spoke radial" system, due to more wire being concentrated
at the feedpoint, vs farther out.
If you compared a ground mount with 120 radials vs a roof mount
with 120 radials, the roof mount would smoke the ground mount
handily. For sure, as far as the local "ground/space" wave.
Also, if this antenna was for MW, and roof mounted, which is
very low height in wavelength, you will need a lot of radials to
equal the 120 on the ground. But if you had the antenna at 1/4
wave up, about 10 radials would equal the 120 on the ground.
I often see and hear about MW comparisons using ground mount
vs elevated, and almost to a tee, most ruin the comparison by
applying substandard radial systems on the elevated antenna.
Either that, or they ignore the number of elevated radials needed
to equal the 120 on the ground. That of course varies with height
in wavelength.
At 1/2 wave, 3-4 radials will equal 120 on the ground.
At 1/4 wave, about 8-12 will be needed.
At 1/8 wave, about 60 or so at least..

And it just gets worse from there as you get lower and
lower. Less than 1/8 wave, and you will need a load of radials
to equal the 120 on the ground. Probably 80-100... ??
Anyway, I've done quite a bit of comparing elevated vs ground
mount on 40m, and there is absolutely no doubt in my mind
that elevated is the best way to go. Totally smokes a ground
mount, as long as the number of needed radials per wavelength
is not ignored.
Even if you equal the ground losses between the two, the
elevated still wins due to more clearance of ground clutter,
and a much better local ground/space wave signal, which
I assume is due to the radiator being high and in the clear.
More line of sight so to speak.. This also greatly improves
the lower angle DX coverage, being both use the same fairly
low angles of radiation.
MK

150. non-antenna question: where should a newbie go...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 06:19:28 UTC
From: Anonymous <anyone@no-spam-please.com>
Message-ID: <060820070219288229%anyone@no-spam-please.com>
Source record: 37714

Where can a newbie go to ask questions like "why do CW rigs have RIT,
is it common for there to be a frequency offset between the two
operators in a CW QSO or what" and so forth. I live in a rural area and
don't think I will be able to blend in with the local ham club. Is
there some nook of the internet where newbie Q&A is welcome?

--
-30-

151. T-match question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 07:14:36 UTC
From: francesco.messineo@gmail.com
Message-ID: <1186384476.701074.21980@q75g2000hsh.googlegroups.com>
Source record: 37715

Hello all,

I built in the years several Yagis (and other antennas). Until now all Yagis I built were calculated with the great program from DL6WU and fed with folded dipole and 4:1 coaxial balun with good results. A couple of them has been fed with gamma match and are working good but needed a lot of tweaking to have low SWR.
Two weeks ago I built a 6 elements yagi for the 70 MHz band, the design this time comes from YU7EF (http://www.yu1arc.com/yu7ef/EF0406.htm), it is made with 10mm elements supported over a 26mm boom (both aluminium). Element to boom spacing is 25mm (end to end) but there is a steel plate (35x55x2 mm) between each element and the boom. The plate is located ad 10mm from each element end (for end I mean the 5mm radius from the center of the element). Each element is supported in a plastic shell bolted to the steel plate with two steel bolts (not touching the element).
I didn't apply any correction factor to the elements, is this right or it's my first error with this antenna?
For the feeder I decided to try with a T match as described in the DL6WU program and the program itself gave me a 504mm as length for (each?) arm of the T match. The "dipole" isn't split in the middle obviously. Then there's the 4:1 coaxial balun and then about 12m of 50 ohm cable. I hadn't enough aluminium tubing for a folded dipole.
The antenna is mounted about 2m from the tip of the roof (V-inverted roof) and about 2m down a 2-lambda 2m yagi (no other place for it, really).
I expected to have a poor match and infacts with 1W forward I first got 100mW reflected (with the T shorts about at the full length of the matching arms). Also the actual reflected power depends on the direction of the antenna, beeing the roof quite polluted with metal of other antennas and poles, but it never reflects less than 80mW with 1W forward.
I then tried moving the shorts toward the boom to find a better match, but to my surprise I discovered almost no effect on reflected power. Now the shorts are about 220mm from the end of the matching arms and reflected power now peaks at about 85mW instead of 100mW, seems like too independent from the short position to be true.
The antenna indeed shows a directional pattern as it should. I tested with local noises and during an ES opening (heard a beacon 2000 km away, peaking at S7 when correctly turned and almost no audible with the side of the antenna), I also worked a station at about 2000 km with power output of less than 4W (but yes, during ES openings you can make QSO even with 1W in a dummy load).
Now I really wanted to understand why this T-match is so "broad", what

errors I might be doing? Can the poor placement of the antenna justify
this behaviour?
Thanks in advance

Francesco IZ8DWF

152. Re: cutting end slots in aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 08:04:39 UTC
From: HH <harryharms@hotmail.com>
Message-ID: <rCAti.16380$4A1.12976@news-server.bigpond.net.au>
Source record: 37716

Judging on my experience as a mechanic and many years with fitting exhaust systems to cars, you need only one cut with the cut at least one and a half times the diameter of the smaller tube diameter.
I am now retired and experimenting with antennas, I use a slitting saw in my vertical mill, makes a beautiful cut!
VK2KCE

"Ed" <Huckleberry_REMOVE_@bigvalley.net> wrote in message news:Xns9983766C81479spectrumhogstarbandn@198.186.192.196...
:
: Just received my order of telescoping aluminum tubing rods from Texas
: Towers. Sizes range from 1" OD to smaller and all 6 feet long. I plan on
: using them as a collapsible verticle on the motor home. Before I start
: hack-sawing away on the ends to cut slots around which I will place my hose
: clamps, does anyone here have any particular tips or techniques to do
: this? I figure I'd just cut two slots with a hacksaw about 1" or so deep.
: If there's a better suggestion, I'd like to hear it before wacking away on
: my expensive tubes.
:
:
: Ed

153. Re: Questions about mast mounted pre-amps.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 11:11:39 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <c8cjo4-1cn.ln1@p400bob.personal.cox.net>
Source record: 37719

Hi Rob

Thats a pretty wide open question... I don't have any model etc recommendations for you, but since nobody has replied to your question...

Suggest you read up (web) and understand the implications of preamps, then with understanding about gain, noise figure, IMD and power handling go and compare various manufacturers models. Relying on empirical "it worked well for me" from fellow amateurs is always fraught with danger!

Keep in mind that for some designs, best NF corresponds with really bad performance in an adjacent strong signal environment. Fiddling with gate bias current is a way to tune this to the best compromise.

You may also wish to review your choice of antennas. Higher gain and steering may be something you'll need (eg for using the higher orbit sats) and the wider pattern from the Lindenblad's may introduce more terrestrial noise than you want. My next experiment for sat work will be a quadrature fed interlaced 2/70 quad.. Cebik has some info on that..

If you are RX only you may even wish to build.

Cheers Bob VK2YQA

Rob Brown wrote:
> I'm looking
> for opinions on a good pre-amp, company and models. I know I need a
> unit with a low noise floor, sub 1 Db.

154. Re: Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 11:49:13 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
Message-ID: <46b709fd$0$30690$4c368faf@roadrunner.com>
Source record: 37717

Hello Mr. Smith,

I still find BPL risky for any gains it might bring forth. As some broadband providers are looking to push into/beyond ethernet data rates, BPL brings to the table sub par data rates with the risk of RFI into a regulated natural resource.

BPL could be nice as a backup system, but it is my opinion that a high speed infrastructure is needed.

It has been really handy that the Mom and Pop grown Cable industry has provided some of this infrastructure.

If we are looking to do this without laying new cable, maybe a cellular structured microwave wireless network would work. I thought the new Wi-Fi was to provide for this?

Regards,

Chris

155. Re: cutting end slots in aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 11:56:18 UTC
From: Jay in the Mojave <jay123a@qnet.com>
Message-ID: <13be332pojn0121@corp.supernews.com>
Source record: 37718

Ed wrote:
> Just received my order of telescoping aluminum tubing rods from Texas
> Towers. Sizes range from 1" OD to smaller and all 6 feet long. I
> plan on using them as a collapsible verticle on the motor home.
> Before I start hack-sawing away on the ends to cut slots around which
> I will place my hose clamps, does anyone here have any particular
> tips or techniques to do this? I figure I'd just cut two slots with
> a hacksaw about 1" or so deep. If there's a better suggestion, I'd
> like to hear it before wacking away on my expensive tubes.
>
>
> Ed
Hello Ed:

You may find that the hand hack saw will be difficult to control and keep the cut straight. I use a inexpensive Band Saw, and cut the slots approx 1 1/2 inches long. Another consideration is the cut slot width maybe to narrow to fully close the outer tubing down on the inner tubing. So making a another saw blade width will not hurt. Use a round or rat tail file to deburr the inside of the tubing. Chain Saw shaping files work quit well for this and are cheap.

You will see cheap crapp hose clamps in the home improvement stores, I have anyway. Find a auto parts store thats sell the Breeze brand hose clamps.

Jay in the Mojave

156. Re: Questions about mast mounted pre-amps.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 12:57:48 UTC
From: Rob Brown <kb8wws@gmail.com>
Message-ID: <1186405068.963726.218290@x40g2000prg.googlegroups.com>
Source record: 37720

On Aug 6, 7:11 am, Bob Bob <bob3b...@suddenlink.net> wrote:
> Hi Rob
>
> Thats a pretty wide open question... I don't have any model etc
> recommendations for you, but since nobody has replied to your question...
>
> Suggest you read up (web) and understand the implications of preamps,
> then with understanding about gain, noise figure, IMD and power handling
> go and compare various manufacturers models. Relying on empirical "it
> worked well for me" from fellow amateurs is always fraught with danger!
>
> Keep in mind that for some designs, best NF corresponds with really bad
> performance in an adjacent strong signal environment. Fiddling with gate
> bias current is a way to tune this to the best compromise.
>
> You may also wish to review your choice of antennas. Higher gain and
> steering may be something you'll need (eg for using the higher orbit
> sats) and the wider pattern from the Lindenblad's may introduce more
> terrestrial noise than you want. My next experiment for sat work will be
> a quadrature fed interlaced 2/70 quad.. Cebik has some info on that..
>
> If you are RX only you may even wish to build.
>
> Cheers Bob VK2YQA
>
> Rob Brown wrote:
> > I'm looking
> > for opinions on a good pre-amp, company and models. I know I need a
> > unit with a low noise floor, sub 1 Db.

Bob,
Thanks for the info. I won't be able to install a tower or any other
large expense project at my QTH for the near future. The XYL isn't
too keen on our hobby and so the best I will be able to do is the pair
of Lindenblad antennas. I'm going with the Lindenblad antennas after
reading the section L.B. Cebik has on his extensive web site. Antenna
is omni-directional, has gain from 3 to 50 degrees, and I can build it
with simple hand tools. I'll start looking for more information about
the pre-amps on-line. I had looked at the AMSAT site, but they didn't
mention too many manufacturers for the pre-amps.
Thanks,
Rob Brown
KB8WWS

157. Re: Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 12:59:07 UTC
From: gsm@mendelson.com
Message-ID: <slrnfbe6gv.v4b.gsm@cable.mendelson.com>
Source record: 37721

Christopher Cox wrote:
> If we are looking to do this without laying new cable, maybe a cellular
> structured microwave wireless network would work. I thought the new
> Wi-Fi was to provide for this?

Here in Israel, the Electric company is NOT allowed to sell Internet access. Planning for the day they will, they have laid fibre optic cables along all of their right of way. Currently they use it for their own internal data communications.

BPL will never be approved here. It was tested and found to cause interference. Here the IDF which is a combination of the Army, Navy, Air Force, Civil Defense, Department of Emergency Preparedness, Homeland Security, all rolled together takes a dim view of radio interference.

While we are a small country, they expect to be able to maintain communications using HF and low band VHF.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

158. Re: Verticals: Earth-Mount vs Roof-Mount

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 13:06:41 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <f976d8$e9l$1@aioe.org>
Source record: 37722

<nm5k@wt.net> wrote
> I think that comparison would be flawed though. That is not an optimum
> "elevated" radial system, and I can see it losing to a 120 radial
> ground system. For one thing, the radial system is not resonant.
> This is quite important for an elevated system. Fairly critical
> really.
> Also, the manner of the wires being laid out like chicken wire mesh
> is not an optimum use of wire. You would have better results using
> the usual "spoke radial" system, due to more wire being concentrated
> at the feedpoint, vs farther out.

However the study was not intended to model an ideal elevated radial system, but one using an existing metal roof to serve as the "other conductor" of an electically short, vertical dipole.

The mesh wires used in the study to simulate the metal roof have a density of well below 1/10 wavelength, and for these conditions the roof would appear essentially solid to r-f.

> I often see and hear about MW comparisons using ground mount
> vs elevated, and almost to a tee, most ruin the comparison by
> applying substandard radial systems on the elevated antenna.
> Either that, or they ignore the number of elevated radials needed
> to equal the 120 on the ground. That of course varies with height
> in wavelength.
> At 1/2 wave, 3-4 radials will equal 120 on the ground.
> At 1/4 wave, about 8-12 will be needed.
> At 1/8 wave, about 60 or so at least..

> And it just gets worse from there as you get lower and
> lower. Less than 1/8 wave, and you will need a load of radials
> to equal the 120 on the ground. Probably 80-100... ??

A NEC-2 model of a 1/4-wave vertical monopole (base at earth level) in the AM broadcast band using just four, 1/4-wave radials elevated 12-15 feet above a perfect earth shows a peak h-plane gain within tenths of a decibel of the theoretical peak value for a 1/4-wave monopole over a perfect ground plane, ie, at least 5 dBi.

Such systems have been installed by commercial AM broadcast stations where the earth at the antenna site makes it impractical to use the standard 120 buried radials. These elevated radial systems permit those stations to produce at least the minimum groundwave field at 1 km for 1 kW of applied power that is required by the FCC for AM broadcast stations -- and with far fewer than "80-100...??" radials elevated less than 1/8-wave, fortunately.

Here is a link to a paper about this
http://www.nottltd.com/ElevatedRadialSystem.pdf

> Even if you equal the ground losses between the two, the
> elevated still wins due to more clearance of ground clutter,
> and a much better local ground/space wave signal, which
> I assume is due to the radiator being high and in the clear.
> More line of sight so to speak.. This also greatly improves
> the lower angle DX coverage, being both use the same fairly
> low angles of radiation.

My models were done over a perfect ground plane in order to show the field of the monopole radiator as it is launched. This is the method used by the FCC in AM broadcast practice.

Terrain, obstructions, r-f ground loss, nearby parasitic radiators etc -- and in the case of ham antennas, their height above the earth -- will have an affect on system performance. But all of that needs to be evaluated separately for the installation conditions, based first on a knowledge of the field pattern launched by the radiator itself.

RF http://rfry.org

159. Re: Questions about mast mounted pre-amps.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 13:17:35 UTC
From: Alan WA4SCA <APBIDDLE@UNITED.NET>
Message-ID: <5s6eb3tbtv252e6ljf3njp7pessooo9pi8@4ax.com>
Source record: 37723

Rob,

As was pointed out, there are many options. Having been active on satellites for 20+ years, I would recommend that you look at the SSB Electronics units http://www.ssbusa.com/gaasfet.html and the ARR units http://www.advancedreceiver.com/page2.html in that order. If you took a poll of AMSAT members, I would be amazed if between the 2 they did not constitute 75% or more used. Both do well in high noise areas. The SSB units have some additional filtering, and adjustable gain.

While they are no longer sold in this country, if you come across a Landwehr unit, it would be worth considering. My 2 meter unit keeps on ticking 21 years later.

One thing to avoid is the units sold by major manufacturers such as Icom. They probably have some use, somewhere, but for satellite ops they soon get replaced as they have poor noise figures.

Finally, it is tempting to go with an RX-only unit. You will want the capability to both receive and transmit on both antennas, which pretty much means a switched unit, or some fancy relays. If you have short runs of high quality cable, you can probably get by on 2 meters with a unit in the shack. A mast mount is better, but for most things, one in the shack, with the above qualifications, is good enough. The 70 cm unit need to be mounted remotely.

--
Alan
WA4SCA

160. Re: Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 13:42:29 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f978gbjf1@nnrp.linuxfan.it>
Source record: 37724

Geoffrey S. Mendelson wrote:

>
> Here in Israel, the Electric company is NOT allowed to sell Internet
> access. Planning for the day they will, they have laid fibre optic
> cables along all of their right of way. Currently they use it for
> their own internal data communications.
> ...
> Geoff.
>

Here in the USA we have manufactured "shortages" to manipulate the law of supply and demand. We have also let our antitrust laws become "trampled." Here, very large corporations manipulate the public as if they are children; these children have become very stupid and have no vision or common sense. To worsen matters, large corporations have bought our government officials and news media; the population is now fed lies, half-truths or simply no facts at all ...

We invented fiber optic cable, however, we will probably be the last in the world to have our whole country with easy access to it--it is not in the telcos best financial interests to see us all with dirt cheap internet access. However, some work against these large corps and attempt to find ways around their manipulations; BPL is but one example of this.

The 700Mhz freqs in question is/are a very good example of this, which is now playing out. Many wish to see these freqs cheap, with abundant access and choices of uses and out from under the direct manipulations of self-serving corporations/politics. However, this is not in the best financial interests of the "powers which be."

700Mhz (or, nationwide cheap fiber optics, for that matter) would be preferable to BPL, however, BPL has the possibility of being able to escape the large political/corporate controls; but, as you can see in the articles about 700Mhz, the billions are already being gotten together by the "evil empire" to buy your future and rent it to you at VERY inflated prices--here in the good 'ole USA ...

Your mileage, as well as your country, may vary ... Robin Hood rides in the form of BPL--sometimes; even Google can appear as the Dragon-Slayer in this sad Greek comedy/tragedy which plays before our eyes ... in America. :-(

Amateur Radio and its' importance just stands as a pale ghost in comparison to the dramatic figures in this play ... the amateur

community were warned--long ago; few paid attention--now it is too late.

Regards,
JS

161. Re: Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 14:14:43 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <n1Gti.13531$B25.2426@news01.roc.ny>
Source record: 37725

John Smith I wrote:
> Geoffrey S. Mendelson wrote:
>
>> Exactly which countries besides the U.S. have allowed it after testing
>> it?
>>
>> Geoff.
>
>
> I am afraid I "hear" that question as:
> ...

A very 'Rumsfeldian' response, i.e, rephrasing the question so as not to have to answer, snipped.

Why don't you answer his question?

162. Re: Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 14:21:35 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f97apljf2@nnrp.linuxfan.it>
Source record: 37726

gwatts wrote:

> ...
> Why don't you answer his question?

Consider it answered--in my last post preceding this one--in detail,
even ...

JS

163. Re: Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 14:23:14 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <m9Gti.13454$ya1.4062@news02.roc.ny>
Source record: 37727

John Smith I wrote:
> ...
> 700Mhz (or, nationwide cheap fiber optics, for that matter) would be
> preferable to BPL, however, BPL has the possibility of being able to
> escape the large political/corporate controls;

Considering that BPL stands for 'Broadband over Power Line' how does
something implemented over the infrastructure of and thus controlled by
the power companies, you know, some of those large corporate entities
you say BPL will escape the control of, escape those large
political/corporate controls?

>
> ... the amateur
> community were warned--long ago; few paid attention--now it is too late.
>

This part, sadly, is probably correct.

164. Re: Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 14:45:13 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f97c5vjf3@nnrp.linuxfan.it>
Source record: 37729

gwatts wrote:

> ...
> Considering that BPL stands for 'Broadband over Power Line' how does
> something implemented over the infrastructure of and thus controlled by
> the power companies, you know, some of those large corporate entities
> you say BPL will escape the control of, escape those large
> political/corporate controls?
> ...

Shouldn't you really be asking:

1) How has this happened? (or, are we the "frog in the pan of boiling water?")

2) How can we stop our public servants (note: some refer to them as "leaders") from criminal, self-serving (pocket stuffing), anti-American and treasonous behavior and engaging in such conspiracies with large business?

3) How can we get real world figures/facts from our news media? And, why are these media outlets not on trial?

4) Etc., etc. ....

Power companies have already attempted to control "their" power-lines (really the public power-lines) from being subjected to a secondary use (BPL), they lost--so far ... American citizens can use their lines as they please. In the end game, I suspect the politicians will be paid off so power companies can hold BPL providers to ransom--this criminal behavior permeates government/business these days ... many are leaving the states, that is one option--let 'em tax the illegals to death.

Regards,
JS

165. Re: non-antenna question: where should a newbie go...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 15:26:24 UTC
From: The Shadow <Repose@Zilch.com>
Message-ID: <F0Hti.6385$Vk6.782@newsfe07.phx>
Source record: 37731

"Anonymous" <anyone@no-spam-please.com> wrote in message
news:060820070219288229%anyone@no-spam-please.com...
>
> Where can a newbie go to ask questions like "why do CW rigs have RIT,
> is it common for there to be a frequency offset between the two
> operators in a CW QSO or what" and so forth. I live in a rural area and
> don't think I will be able to blend in with the local ham club. Is
> there some nook of the internet where newbie Q&A is welcome?
>
> --
> -30-

This group is for antennas - so suggest you use
rec.radio.amateur.equipment news group.

News groups for Ham radio and their useage are listed at URL:
http://ac6v.com/newsgroups.htm

To answer your question about RIT useage on CW

RIT. Receiver Incremental Tuning (Clarifier on some rigs) allows you to
receive slightly above or below your transmit frequency. For DXing, it is
typically used for CW split pileups - set your main dial to 2 to 5 kHz up
from the DX station and use RIT to hear the DX station. This allows the DX
station to spread out the callers and prevents chaos on the DX frequency.

If an SSB DX station is operating with a small split, the RIT range may
allow you to use RIT to achieve the split. RIT typically covers +/- 5 kHz or
+/- 10 kHz and is frequently used for CW split operating, but not often in
an SSB split operation.

Another use for RIT is when you wish to transmit on a given frequency and
the station you are receiving is off frequency or drifts away or starts
chasing you by retuning as you tune on them. Rather than change the main
tuning dial (thus your transmit frequency) use RIT. The Main Tuning dial
determines the transmit frequency and the RIT determines the receive
frequency.

There are several good books that will explain DXing, operating, and
transceiver controls-- use google to search for Amateur Radio DX Books

Good Luck -- see you at rec.radio.amateur.equipment

Lamont

166. Re: Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 15:26:59 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <46B73DC3.3030601@dsl.pipex.com>
Source record: 37582

> Amateur Radio and its' importance just stands as a pale ghost in
> comparison to the dramatic figures in this play ... the amateur
> community were warned--long ago; few paid attention--now it is too late.
==========
Considering the efforts made and attention paid by ARRL on behalf of all
radio amateurs in the USA to stop BPL , the above seems rather off the
mark . In the end BPL will not come to fruition whatever the 'pushing'
by FCC and Commercial Powers , also because it will highly likely not
be commercially viable.

Frank GM0CSZ / KN6WH

167. Re: cutting end slots in aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 15:33:57 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1186414437.039503.323730@m37g2000prh.googlegroups.com>
Source record: 37583

On 5 Aug, 12:22, Ed <Huckleberry_REMO...@bigvalley.net> wrote:
> > Circular saw with a thin wheel grinder/cutter.
>
> You mean like a small cutting disk on a Dremel Tool?
>
> Ed

No. I meant a normal 6 1/2 0r 7' power saw with a thin grinding blade
or steel cutting blade. The cut width will be better than a hack saw
which I have found often to be to narrow as well as difficult to
control
Art

168. Re: Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 15:35:27 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f97f44$j0r$1@nnrp.linuxfan.it>
Source record: 37584

Highland Ham wrote:

> ==========
> Considering the efforts made and attention paid by ARRL on behalf of all
> radio amateurs in the USA to stop BPL , the above seems rather off the
> mark . In the end BPL will not come to fruition whatever the 'pushing'
> by FCC and Commercial Powers , also because it will highly likely not
> be commercially viable.
>
> Frank GM0CSZ / KN6WH

I am afraid you missed the whole point, did you just "come on board?"

The surest way to implement the downfall of BPL would be to see the success of 700Mhz "freedom zone."

Then, BPL would pale in comparison to a method that can penetrate virtually any building and you can use while you walk down the street ...

Unfortunately, the mindset you have is shared by many, too many; unable to see the forest through the trees--you attempt to be the tail which wags the dog; while that may, or may not, work for high powers in high places--I believe such is doomed to failure--indeed, isn't that how we got here?

Regards,
JS

169. Re: Grounding systems -- need the help of some good elmers

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 15:35:49 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <demdnZ5r87utrCrbnZ2dnUVZ_ternZ2d@bright.net>
Source record: 37728

John's observations are useful. A dramatic example happened to me many years ago with a second story transmitter having a grounding wire that was as short as possible: with a change of frequency, the grounding wire became resonant and caused the transmitter to be very hot - I can still see the small scar tissue where I touched a knob. The short term cure was to run a longer grounding wire in parallel, which detuned the first wire.

If you use a reasonably balanced antenna (dipole, yagi, log-periodic, ...) it is unlikely that you will have a problem.

If you are to use a doublet fed with open-wire and fairly low power, an old Johnson Matchbox will be an ideal way to keep your transmitter happy.

Keep us posted. 73, Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"JOHN PASSANEAU" <jxp16@psu.edu> wrote in message
news:Xns997DC949278D0JXP16PSUEDU@216.196.97.136...
> >
>
> >
>
> Hi Danny:
>
> You are of course correct, but with RF in the shack problems levels are
> important. If the level of RF is below some threshold it causes no harm.
> Almost all Ham stations operate just fine with low levels of unbalance
> and other defects in the antennas.
> Just for interest sake I ran some numbers on a model ground system. Let's
> assume you have a perfect ground system and you connect to it from the
> shack on the second floor using 12' of #6 wire. And it runs in a straight
> line, no bends or curls. The self inductance of that wire is about
> 56.22uHy.
> So what will be the reactance of that wire at 3.5 MHz? Doing the math I
> get 1,235.7ohms. At the other extreme 28MHz, I get 9,886.52ohms. These
> are numbers that hardly make me confident that I have any kind of a RF
> ground.
> By the way at 60Hz the reactance is 0.021ohms that I think is a good
> ground.
> Please excuse me for harping on this, but I run the electronics shop in
> the Physics dept at Penn State University. I'm constantly seeing many
> meter long thin wires tied to some cold water pipe or something in a lab
> that is supposed to get rid of all the high frequency noise in some

> experiment and it has no chance of helping. If physics grad students have
> problems understanding grounding it's no wonder that Ham's do too.
>
> John Passaneau W3JXP
>

170. Re: Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 15:39:04 UTC
From: gsm@mendelson.com
Message-ID: <slrnfbeg0m.222.gsm@cable.mendelson.com>
Source record: 37585

gwatts wrote:

> A very 'Rumsfeldian' response, i.e, rephrasing the question so as not to
> have to answer, snipped.

No, I asked it that way because I know of no country besides the U.S. that tested BPL and allowed it, but in case there were any I was not aware of, anyone who knew could answer.

Do you know of any? The only country that came close that I know of was Austtrialia, because they have large sparsely populated areas. However last I heard it was canceled because it was shown to interfere with Coastal radio stations.

Geoff.
--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

171. Re: Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 15:39:06 UTC
From: gsm@mendelson.com
Message-ID: <slrnfbeg2t.222.gsm@cable.mendelson.com>
Source record: 37586

gwatts wrote:
> John Smith I wrote:
>> ...
>> 700Mhz (or, nationwide cheap fiber optics, for that matter) would be
>> preferable to BPL, however, BPL has the possibility of being able to
>> escape the large political/corporate controls;
>
> Considering that BPL stands for 'Broadband over Power Line' how does
> something implemented over the infrastructure of and thus controlled by
> the power companies, you know, some of those large corporate entities
> you say BPL will escape the control of, escape those large
> political/corporate controls?

Because it is low power radio waves transmitted over very long wires.

Geoff.
--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

172. Re: 2L Steppir or 2L Cubical quad

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 15:49:57 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <adudnQIgZe4dqSrbnZ2dnUVZ_g-dnZ2d@bright.net>
Source record: 37730

Dear Frank (no call, France?):

Another choice is a log-periodic-dipole-array (LPDA). Several are
available that do a good job of covering 14 MHz to 30 MHz. One such
manufacturer is Tennadyne

http://www.tennadyne.com/specs&prices.htm

The link shows the specifications of most of their models.

LPDAs have no moving parts and everything is in a plane. If you purchase
one, I can offer a couple of very simple (almost no cost) enhancements.

As I recall, Tennadyne has a distributor in your area.

73, Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

"Francis Pinson" <nosnip@free.fr> wrote in message
news:46b5c1c0$0$24146$426a74cc@news.free.fr...
> Tks to read.
>
> What is the best choice for 5 bands (10 to 20m) : 2L Steppir or 2L cubical
> quad ?
>
> What do you think about this ?..... It is for my holidays home...
>
> Nice to read you ... Tks to all
>
> Best 73/DX
>
> Frank
>
>

173. Re: Questions about mast mounted pre-amps.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 15:50:16 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <YqHti.16461$ug3.10413@trnddc06>
Source record: 37587

"Rob Brown" <kb8wws@gmail.com> wrote in message
news:1186405068.963726.218290@x40g2000prg.googlegroups.com...
> On Aug 6, 7:11 am, Bob Bob <bob3b...@suddenlink.net> wrote:
>> Hi Rob
>>
>> Thats a pretty wide open question... I don't have any model etc
>> recommendations for you, but since nobody has replied to your question...
>>
>> Suggest you read up (web) and understand the implications of preamps,
>> then with understanding about gain, noise figure, IMD and power handling
>> go and compare various manufacturers models. Relying on empirical "it
>> worked well for me" from fellow amateurs is always fraught with danger!
>>
>> Keep in mind that for some designs, best NF corresponds with really bad
>> performance in an adjacent strong signal environment. Fiddling with gate
>> bias current is a way to tune this to the best compromise.
>>
>> You may also wish to review your choice of antennas. Higher gain and
>> steering may be something you'll need (eg for using the higher orbit
>> sats) and the wider pattern from the Lindenblad's may introduce more
>> terrestrial noise than you want. My next experiment for sat work will be
>> a quadrature fed interlaced 2/70 quad.. Cebik has some info on that..
>>
>> If you are RX only you may even wish to build.
>>
>> Cheers Bob VK2YQA
>>
>> Rob Brown wrote:
>> > I'm looking
>> > for opinions on a good pre-amp, company and models. I know I need a
>> > unit with a low noise floor, sub 1 Db.
>
> Bob,
> Thanks for the info. I won't be able to install a tower or any other
> large expense project at my QTH for the near future. The XYL isn't
> too keen on our hobby and so the best I will be able to do is the pair
> of Lindenblad antennas. I'm going with the Lindenblad antennas after
> reading the section L.B. Cebik has on his extensive web site. Antenna
> is omni-directional, has gain from 3 to 50 degrees, and I can build it
> with simple hand tools. I'll start looking for more information about
> the pre-amps on-line. I had looked at the AMSAT site, but they didn't
> mention too many manufacturers for the pre-amps.
> Thanks,
> Rob Brown

> KB8WWS

Hi Rob

Have you considered joining AMSAT? There is a wealth of information on
HAM satellites within that organization. I consider Bob's advice about
preamps to be excellent. AMSAT Journal, Volume 28 Number 4, July/August
2005 has a good article on preamps for HAM satellite reception.
Cebik's text on Lindenblads implies that it needs to be located only a few
feet above ground in order to realize the "omni-hemispheric" pattern, so
line loss isnt likely to be reason enough to use a preamp with it anyway.

Jerry

174. Re: non-antenna question: where should a newbie go...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 16:28:56 UTC
From: "Rick H." <none@dev.nul>
Message-ID: <060820071228564105%none@dev.nul>
Source record: 37588

In article <060820070219288229%anyone@no-spam-please.com>, Anonymous
<anyone@no-spam-please.com> wrote:

> some nook of the internet where newbie Q&A is welcome?

hamforum.com is relatively friendly to newbies ... well-crafted Google
searches will also dig up the answer to almost any question.

175. Re: Time to brush up on 700Mhz Antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 16:37:10 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <W6Iti.13538$B25.6640@news01.roc.ny>
Source record: 37589

Geoffrey S. Mendelson wrote:
> gwatts wrote:
>
>
>>A very 'Rumsfeldian' response, i.e, rephrasing the question so as not to
>>have to answer, snipped.
>
>
> No, I asked it that way...

My response was to Smith, not you.

176. Looking for advice on CAP/MARS antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 16:52:28 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.06.16.52.26.877349@from.qrz.com>
Source record: 37590

I'm quite active in CAP and MARS and so I need to be able to operate on a fairly long list of frequencies between about 2.2 MHz and about 27 MHz (actually up to 24 MHz would probably be OK, not much goes on above there).

I'm looking for the best compromise antenna that will get me most of those frequencies with reasonable receive performance without a tuner, and SWRs under about 3:1 that my FT-1000's internal tuner can handle.

The plan is to program the frequencies of interest into my rig's memories and then scan across them, hence the need for reasonable receive performance with the tuner out of the circuit.

I'm aware of the B&W "radiating dummy load" (TTFD) antennas but I'm not quite ready to give up that much efficiency and I'm DEFINITELY not ready to blow $300 on one.

I don't mind putting up a multi-legged dipole array but I don't want to go overboard, and from my calculations (such as they are), I'd need a total of SIX (6!!!) dipoles all fed with a common feedline and operating on their fundamentals and third or fifth harmonics in order to stand any chance at all of covering it all.

I was thinking of maybe something like some variation of the G5RV, or the W5GI "Mystery Antenna" (http://www.w5gi.com), cut to an appropriate center frequency above or below the 20 meter band as needed, then maybe (MAYbe) I could get away with three of them.

Any thoughts?

177. Any homebrew auto-tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 17:38:49 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.06.17.38.47.822977@from.qrz.com>
Source record: 37591

Are there any construction articles around anywhere that describe an auto-tuner similar to the LDG and SGC offerings?

I need an auto-tuner that I can control from a laptop, and set frequencies as needed (mostly for ALE). I can do the digital design and the software in my sleep, for an embedded microprocessor that can control all of that, but the heavy-lifting part of the antenna tuner (all the toroids and caps and relays) is a bit beyond my capabilities.

If there are any construction articles that I can adapt to my needs that would be a very big help.

Thanks...

178. Re: cutting end slots in aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 17:46:30 UTC
From: tom <tom_tube_dude@tomtubedude.net>
Message-ID: <46B75E76.4CDA7FAF@tomtubedude.net>
Source record: 37592

hi

I dremel will work nice but you may want to build a small
jig to keep things aligned.

I would drill a small dia. hole at the bottom of the
place where your cut will end so it will prevent the
slot from continuing on and splitting the tubing.

good luck

tom

179. Jumpers across tower sections

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 18:00:08 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.06.18.00.06.782238@from.qrz.com>
Source record: 37593

For lightning protection, is it generally considered good practice to install heavy-gauge copper wire jumpers across each junction point between tower sections?

My guess is that the electrical connection between one tower section and the next might be somewhat variable, especially if the tower sections weren't new when the tower was assembled.

180. Re: Jumpers across tower sections

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 18:04:27 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns998470D1A3CA4spectrumhogstarbandn@198.186.192.196>
Source record: 37594

> For lightning protection, is it generally considered good practice to
> install heavy-gauge copper wire jumpers across each junction point
> between tower sections?
>
> My guess is that the electrical connection between one tower section
> and the next might be somewhat variable, especially if the tower
> sections weren't new when the tower was assembled.
>
>

No, it is not. Common commercial practice is to bond the base of each tower to a good common copper earth ground system around the radio vault structure... assuming the vault is close to the towers. ... otherwise, additional grounding would be needed around the towers' bases.

Ed

181. Re: Jumpers across tower sections

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 19:02:00 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f97r7f$gd7$1@nnrp.linuxfan.it>
Source record: 37595

Rick (W-A-one-R-K-T) wrote:

> ...
> My guess is that the electrical connection between one tower section and
> the next might be somewhat variable, especially if the tower sections
> weren't new when the tower was assembled.
>

Best case scenario? Might help.

Worst case scenario? Can't hurt.

That said, could a corrosion condition arise from the "bonding" of
dissimilar metals? Would "tinning" the copper wire with solder
slow/prevent this possibility? Perhaps another fix ...

Regards,
JS

182. Re: Any homebrew auto-tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 19:17:52 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f97s51$k4k$1@nntp1.jpl.nasa.gov>
Source record: 37598

Rick (W-A-one-R-K-T) wrote:
> Are there any construction articles around anywhere that describe an
> auto-tuner similar to the LDG and SGC offerings?
>
> I need an auto-tuner that I can control from a laptop, and set frequencies
> as needed (mostly for ALE). I can do the digital design and the software
> in my sleep, for an embedded microprocessor that can control all of that,
> but the heavy-lifting part of the antenna tuner (all the toroids and caps
> and relays) is a bit beyond my capabilities.
>
> If there are any construction articles that I can adapt to my needs that
> would be a very big help.
>
> Thanks...
>
>
The original LDG tuner was described in a construction article in QST,
including a schematic. The SGC manuals have the schematic in them.

Practically speaking, it's just a bunch of relays. The hard part is
finding suitable relays. The LDG uses a L network with the capacitor
switched either to the input or output and inductors wound on toroid
cores. The SGC uses a pi network, and closewound air core inductors.

The values are in an approximate powers of two sequence (allowing for
standard values and the fact that you only get integer numbers of turns)
Capacitors in the AT11: 5,10,20,39,82,160,320,640 pF
Inductors in the AT11: 0.11, 0.22, 0.39, 0.59, 1.25, 2.5, 5, 10 uH

how much power are you going to run and what's the maximum mismatch?
that determines the size of the wire in the inductors and the
current/voltage ratings of the capacitors.
You also want to decide if you want latching or non-latching relays.
Most modern tuners use latching relays because after tuning, you want
power to be reduced to a minimum. For ALE, this might not be as big a deal.

Most modern tuners also implement some sort of frequency counter, which
is then used for a lookup table to find a previously set configuration.

Another key design aspect is that you probably want to shut down the
microprocessor after tuning, so that you don't have spurious signals
from the microprocessor clock. Either that, or choose a clock frequency
where the harmonics don't fall in *bad* places.

I've gone through the design and build exercise several times. Unless
you're doing it for the experience of designing an autotuner, I suspect

that buying a ready made tuner like the LDG AT200PC, which has a RS232 interface, is probably the cheapest and easiest solution. It has a published control protocol which is easy to work with (except that you need to be able to generate a pulse on RTS to wake it up...).

Jim, W6RMK

183. Re: Any homebrew auto-tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 19:18:37 UTC
From: dplatt@radagast.org
Message-ID: <dp8ko4-869.ln1@radagast.org>
Source record: 37597

In article <pan.2007.08.06.17.38.47.822977@from.qrz.com>,
Rick (W-A-one-R-K-T) <get.my.email@from.qrz.com> wrote:

>Are there any construction articles around anywhere that describe an
>auto-tuner similar to the LDG and SGC offerings?
>
>I need an auto-tuner that I can control from a laptop, and set frequencies
>as needed (mostly for ALE). I can do the digital design and the software
>in my sleep, for an embedded microprocessor that can control all of that,
>but the heavy-lifting part of the antenna tuner (all the toroids and caps
>and relays) is a bit beyond my capabilities.
>
>If there are any construction articles that I can adapt to my needs that
>would be a very big help.

There was a two-part (I think) article in QST a couple of years ago
which showed a high-power external ATU with onboard microprocessor
control.

Its design was rather different from the LDG/SGC/Sunair/what-have-you
microprocessor-controlled switched-cap/inductor pi/L tuner. It
uses air-variable capacitors and a roller inductor (in a fairly
typical T-network). It doesn't implement automatic search-and-match.
Instead, it tunes from memory. You tune your radio to a specific
frequency, adjust the caps and inductor for the desired match using
up/down toggle switches, and then hit a "memorize" button, and the
controller remembers the frequency and the correct reactance settings.
On subsequent frequency changes, you just select the desired frequency
and the correct reactances are "dialed in".

Eliminating the "try lots of combinations to achieve the lowest SWR"
part of the system will greatly simplify the RF part of the
implementation... you won't need to implement the voltage and current
detectors, phase comparators, etc. needed to permit the digital logic
to measure SWR, etc. The on-board digital logic might be something as
simple as a micro which can [1] run a set of three stepper or gearhead
motors to rotate the cap and inductor shafts, and [2] read out DC
voltages from a set of potentiometers connected to the shafts.

A simple serial-port or USB protocol would then allow the PC to
determine the current settings of the reactances, and control the
motors to adjust them as needed for a new frequency. A second serial
or USB port would be used to communicate with whatever your rig is, to
either read out the frequencies being tuned, or to switch the rig to a
different frequency.

A similar system could be done with switched banks of inductors and caps, in the usual power-of-two size hierarchy. In this case, the micro would be just ordered to turn on or off the various relays used to switch toroids and caps in and out of the series and shunt circuits.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

184. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 19:21:08 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f97sb4$k4k$2@nntp1.jpl.nasa.gov>
Source record: 37599

Ron in Radio Heaven wrote:
> I've never paid attention to the tool they use
> when they put up the tent at the Charlotte show,
> but it'll drive a 1 inch solid tent stake through
> the asphalt parking lot like it's butter.
>
> I've never been there to see what they have to do to pull
> them out when the tent comes down.

An automobile bumper jack works fairly well as a stake puller.

185. Re: Jumpers across tower sections

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 19:29:54 UTC
From: Tehrasha Darkon <darkon@netins.net>
Message-ID: <pan.2007.08.06.19.29.54@netins.net>
Source record: 37596

On Mon, 06 Aug 2007 18:04:27 +0000, Ed wrote:

>> For lightning protection, is it generally considered good practice to
>> install heavy-gauge copper wire jumpers across each junction point
>> between tower sections?
>>
>> My guess is that the electrical connection between one tower section
>> and the next might be somewhat variable, especially if the tower
>> sections weren't new when the tower was assembled.
>>
>>
>>
>
> No, it is not. Common commercial practice is to bond the base of each
> tower to a good common copper earth ground system around the radio vault
> structure... assuming the vault is close to the towers. ... otherwise,
> additional grounding would be needed around the towers' bases.
>
>
> Ed

Excellent explaination of how to properly ground the base of your tower.
Too bad it doesnt address the question asked, which was the grounding
between tower segments.

--Teh

186. Re: Near field vs Far field measurements at 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 19:30:26 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f97ssjkge1@nntp1.jpl.nasa.gov>
Source record: 37600

Steve Reinhardt wrote:

>
> Well, as I mentioned, this is less about an absolute antenna gain than a
> figure of merit. Using a dipole as the first, reference transmitting
> antenna is part of the plan. I may be crazy, but I'm not entirely stupid
> ;-) (Well, maybe. Time will tell...)
>
>> You'll get strong reflections from the ground between the antennas.
>
>
> Ah, yet another thing I have to consider. Since at least two of the
> tested antennas will be primarily vertical, I was planning to make the
> test antennas all vertical. So, I can talk myself into believing the
> ground reflections are part of the real world installations, or I can
> chuck it all and rely solely upon modeling. One is probably smarter, the
> other more viscerally stimulating. I leave to the reader to sort out
> which is which.

The tricky thing is that the reflections will have a different effect on your reference antenna observations than on your Antenna Under Test (AUT) measurements (consider comparing a dipole to dipole, where you get a definite ground reflection, vs high gain dish to high gain dish)..

The way to handle this, if you've got time and inclination, is to scan one of the antennas in height. That is, set up your AUT (or reference dipole), then move the measurement probe vertically over a distance of several wavelengths, making measurements at several points. From this, you can calculate the effect of the ground reflection.

If you google: Ground Reflection Range Antenna Gain Measurement, you might turn up something useful. It's also described in Kraus's book.

You might also want to look up the "three antenna method" which allows you to get absolute measurements.

Jim, W6RMK

187. Re: Jumpers across tower sections

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 20:20:42 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.06.20.20.42.629022@from.qrz.com>
Source record: 37601

On Mon, 06 Aug 2007 18:04:27 +0000, Ed wrote:

> No, it is not. Common commercial practice is to bond the base of each
> tower to a good common copper earth ground system around the radio vault
> structure... assuming the vault is close to the towers. ... otherwise,
> additional grounding would be needed around the towers' bases.

Good afternoon, Ed.

I am in the process of doing that, but my concern is that the second through fifth tower sections may or may not have a decent electrical connection to the first (lowest) tower section which is the one that's grounded.

188. Re: Any homebrew auto-tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 20:58:43 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f98225nct1@nntp1.jpl.nasa.gov>
Source record: 37602

Dave Platt wrote:
> In article <pan.2007.08.06.17.38.47.822977@from.qrz.com>,
> Rick (W-A-one-R-K-T) <get.my.email@from.qrz.com> wrote:
>
>
>>Are there any construction articles around anywhere that describe an
>>auto-tuner similar to the LDG and SGC offerings?
>>
>>I need an auto-tuner that I can control from a laptop, and set frequencies
>>as needed (mostly for ALE). I can do the digital design and the software
>>in my sleep, for an embedded microprocessor that can control all of that,
>>but the heavy-lifting part of the antenna tuner (all the toroids and caps
>>and relays) is a bit beyond my capabilities.
>>
>>If there are any construction articles that I can adapt to my needs that
>>would be a very big help.
>
>
> There was a two-part (I think) article in QST a couple of years ago
> which showed a high-power external ATU with onboard microprocessor
> control.
>
> Its design was rather different from the LDG/SGC/Sunair/what-have-you
> microprocessor-controlled switched-cap/inductor pi/L tuner. It
> uses air-variable capacitors and a roller inductor (in a fairly
> typical T-network).

This was an interesting approach (and I believe parts of it are sold as
a kit or assembled device, too). It would be a good approach for a
one-off, but if are going to do more than one of them, implying that you
need to get all the parts new (as opposed to scrounging surplus), it
gets pretty expensive pretty quick. (fiddling around to work out
mechanical details to use what's in your junk box and at the surplus
store is fine, when you build one.. gets pretty tedious if you want to
build 8)

It also might not tune fast enough for some ALE type applications or
have sufficient resolution.

Consider a switched relay scheme with 8 relays for L and 8 for C..
you've got 256 possible values. With a standard air variable C driven
by a motor, you'd need some sort of reduction gearing to get the ability
to set the plates to better than 1 degree accuracy. You could use a
stepper or a dc motor with an encoder, but you're still limited in the
speed at which you can go from one setting to another (I'd guess a

couple seconds... fast compared to cranking knobs yourself, slow compared to 10-20 milliseconds for a relay). The roller inductor has reduction gearing essentially built in, but, again, you're not going to be spinning it at 3600 RPM.. Probably more like 60 or 120 RPM (2 knob turns per second is pretty quick). Vacuum variables are more like the roller inductor (many turns to span the capacitance range). Jennings does life testing with 50-75% stroke at 200-300 rpm... at that speed, a cap that takes 10 turns from end to end could do 20-30 strokes per minute, or a complete stroke in 3 seconds or so.

>
> Eliminating the "try lots of combinations to achieve the lowest SWR"
> part of the system will greatly simplify the RF part of the
> implementation... you won't need to implement the voltage and current
> detectors, phase comparators, etc. needed to permit the digital logic
> to measure SWR, etc. The on-board digital logic might be something as
> simple as a micro which can [1] run a set of three stepper or gearhead
> motors to rotate the cap and inductor shafts, and [2] read out DC
> voltages from a set of potentiometers connected to the shafts.

An ordinary pot hooked to the shaft probably won't do as a feedback device. a) resolution issues, b) life... Typical panel pots have lives in the million moves range, which seems like a lot, until you do scanning 24/7 with a move every couple seconds.. say 20,000 moves/day will burn through a million moves in less than 2 months. Their resistance vs position will also change over life (you don't notice this on a volume control). There are feedback pots designed for this kind of duty that have much longer lives and have high quality resistive elements and wipers, but they aren't cheap. You'd probably want to use a shaft encoder (and incremental shaft encoders with 1000 pulses/rev are easy to come by).

Any way you look at it, there's a fair amount of electromechanical engineering that goes into making a reliable system like this (which is why the commercial units are fairly expensive..It's not just because they're connected to multi $100K plasma etchers.). In the classic antenna tuner case, it's a bit easier, because you don't need high quality initial position, just get close enough, and home in on the optimum setting for the match.

>
> A simple serial-port or USB protocol would then allow the PC to
> determine the current settings of the reactances, and control the
> motors to adjust them as needed for a new frequency. A second serial
> or USB port would be used to communicate with whatever your rig is, to
> either read out the frequencies being tuned, or to switch the rig to a
> different frequency.
>
> A similar system could be done with switched banks of inductors and
> caps, in the usual power-of-two size hierarchy. In this case, the
> micro would be just ordered to turn on or off the various relays used

> to switch toroids and caps in and out of the series and shunt circuits.
>

Which is essentially what something like the LDG AT200PC is..

189. Re: Any homebrew auto-tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 22:20:06 UTC
From: Hank Zoeller <bogusaddress@dontbothernotvalid.com>
Message-ID: <46b79e7a$0$19646$c3e8da3@news.astraweb.com>
Source record: 37603

Rick (W-A-one-R-K-T) wrote:
> Are there any construction articles around anywhere that describe an
> auto-tuner similar to the LDG and SGC offerings?

http://www.miami.muohio.edu/president/personal/w8zr/eztuner/ezhistory.htm
http://www.somis.org/bbat.html

--
HZ

190. Real happiness...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 22:23:22 UTC
From: z.m.adel@gmail.com
Message-ID: <1186439002.758855.102900@d55g2000hsg.googlegroups.com>
Source record: 37604

For everyone who search for real happiness...
Please give some care to these sites :
http://al-sunnah.com/
http://www.islam-guide.com/
http://www.thelastingmiracle.com/eng/
http://www.harunyahya.com/index.php
http://www.islamqa.com/special/index.php?subsite=12&ln=eng

191. Re: Looking for advice on CAP/MARS antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 22:36:22 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <gvNti.1781$rG7.886@nlpi061.nbdc.sbc.com>
Source record: 37606

Rick (W-A-one-R-K-T) wrote:
> I'm quite active in CAP and MARS and so I need to be able to operate on a
> fairly long list of frequencies between about 2.2 MHz and about 27 MHz
> (actually up to 24 MHz would probably be OK, not much goes on above there).
>
> I'm looking for the best compromise antenna that will get me most of those
> frequencies with reasonable receive performance without a tuner, and SWRs
> under about 3:1 that my FT-1000's internal tuner can handle.
>
> The plan is to program the frequencies of interest into my rig's memories
> and then scan across them, hence the need for reasonable receive
> performance with the tuner out of the circuit.
>
> I'm aware of the B&W "radiating dummy load" (TTFD) antennas but I'm not
> quite ready to give up that much efficiency and I'm DEFINITELY not ready
> to blow $300 on one.
>
> I don't mind putting up a multi-legged dipole array but I don't want to go
> overboard, and from my calculations (such as they are), I'd need a total
> of SIX (6!!!) dipoles all fed with a common feedline and operating on
> their fundamentals and third or fifth harmonics in order to stand any
> chance at all of covering it all.
>
> I was thinking of maybe something like some variation of the G5RV, or the
> W5GI "Mystery Antenna" (http://www.w5gi.com), cut to an appropriate center
> frequency above or below the 20 meter band as needed, then maybe (MAYbe) I
> could get away with three of them.
>
> Any thoughts?
>

Rick;

Don't sell the B&W antenna short. It is more than sufficient for most
CAP/MARS/Amateur communications. When configured as a NVIS antenna you
can reach almost everyone in your region. I have worked a distance
sufficient to cover the upper portion of the US east of the Mississippi.
Yes the efficiency of the B&W is not on a par with a tuned dipole
antenna but it offers the flexibility to cover all the CAP/MARS/Amateur
frequencies with out having to resort to an antenna tuner. Even then the
relative efficiency of the B&W when compared to an out of resonate
dipole is more than enough to compensate. This is why CAP/MARS/DOD use
the B&W for ALE communications.
If you insist in not using the B&W then a fan array of dipoles cut for
your frequencies of choice can be used. There is some interaction

between bands using this type of antenna which complicates the tuning of the various dipoles. Be ready for a lot of ups and downs during tuning. There is no best antenna for anything. The standard to which the relative efficiency virtually all antenna are compared to is the dipole. What ever you do it isn't wrong,just different.

Dave Nagel
RF 143
WD9BDZ

BTW: I believe the current cost for a B&W 160-6 non stainless steel antenna is about $225US from most sources.

192. Re: Real happiness...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 22:39:39 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f987vi$d8o$1@nnrp.linuxfan.it>
Source record: 37605

z.m.adel@gmail.com wrote:

> ...

The only good mooselum is a dead one, tell your buddies not to be
fooled; although our government may tolerate some of your chit, at the
present time, I am one of a group of many who wish you made harmless, or
else wish you dead ... end of story.

Consider your A$$ PLONKED!

Regards,
JS

193. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 22:45:34 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <iwNti.37320$fJ5.31288@pd7urf1no>
Source record: 37607

Jim Lux wrote:
> Ron in Radio Heaven wrote:
>
>> I've never paid attention to the tool they use
>> when they put up the tent at the Charlotte show,
>> but it'll drive a 1 inch solid tent stake through
>> the asphalt parking lot like it's butter.
>>
>> I've never been there to see what they have to do to pull
>> them out when the tent comes down.
>
>
> An automobile bumper jack works fairly well as a stake puller.

Fairly well? It works great! Pulls out a 10 foot ground
rod like it was set in butter. The big thing is that once
you've lifted the ground rod a foot or so, you can pretty well
pull it out by hand. I just wish there was some way to
jack it in!!

Irv Ve^BP

194. Re: Any homebrew auto-tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 23:09:06 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f989mjrmc1@nntp1.jpl.nasa.gov>
Source record: 37608

Hank Zoeller wrote:
> Rick (W-A-one-R-K-T) wrote:
>
>> Are there any construction articles around anywhere that describe an
>> auto-tuner similar to the LDG and SGC offerings?
>
>
> http://www.miami.muohio.edu/president/personal/w8zr/eztuner/ezhistory.htm

That's the stepper motor controlled one.. Note that he used a switch to switch between fixed inductors rather than a roller inductor. Also note the comment about 3 months of evenings and weekends to build it.

> http://www.somis.org/bbat.html
>

195. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 23:10:19 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f989osrmc2@nntp1.jpl.nasa.gov>
Source record: 37609

Irv Finkleman wrote:
> Jim Lux wrote:
>
>> Ron in Radio Heaven wrote:
>>
>>> I've never paid attention to the tool they use
>>> when they put up the tent at the Charlotte show,
>>> but it'll drive a 1 inch solid tent stake through
>>> the asphalt parking lot like it's butter.
>>>
>>> I've never been there to see what they have to do to pull
>>> them out when the tent comes down.
>>
>>
>>
>> An automobile bumper jack works fairly well as a stake puller.
>
>
> Fairly well? It works great! Pulls out a 10 foot ground
> rod like it was set in butter. The big thing is that once
> you've lifted the ground rod a foot or so, you can pretty well
> pull it out by hand. I just wish there was some way to
> jack it in!!
>
> Irv Ve^BP

Also helps to have a 2' sheet of plywood with a 4" hole in the middle
that you can set on the ground around the stake to set the jack base on.
In goopy soil, you can drive the base of the jack into the muck before
you get the rod out.

196. Re: Looking for advice on CAP/MARS antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-06 23:21:08 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f98ad5$s2n$1@nntp1.jpl.nasa.gov>
Source record: 37610

David G. Nagel wrote:
> Rick (W-A-one-R-K-T) wrote:
>
>> I'm quite active in CAP and MARS and so I need to be able to operate on a
>> fairly long list of frequencies between about 2.2 MHz and about 27 MHz
>> (actually up to 24 MHz would probably be OK, not much goes on above
>> there).
>>
>> I'm looking for the best compromise antenna that will get me most of
>> those
>> frequencies with reasonable receive performance without a tuner, and SWRs
>> under about 3:1 that my FT-1000's internal tuner can handle.
>>
>> The plan is to program the frequencies of interest into my rig's memories
>> and then scan across them, hence the need for reasonable receive
>> performance with the tuner out of the circuit.
>>
>> I'm aware of the B&W "radiating dummy load" (TTFD) antennas but I'm not
>> quite ready to give up that much efficiency and I'm DEFINITELY not ready
>> to blow $300 on one.
>>
>> I don't mind putting up a multi-legged dipole array but I don't want
>> to go
>> overboard, and from my calculations (such as they are), I'd need a total
>> of SIX (6!!!) dipoles all fed with a common feedline and operating on
>> their fundamentals and third or fifth harmonics in order to stand any
>> chance at all of covering it all.
>>
>> I was thinking of maybe something like some variation of the G5RV, or the
>> W5GI "Mystery Antenna" (http://www.w5gi.com), cut to an appropriate
>> center
>> frequency above or below the 20 meter band as needed, then maybe
>> (MAYbe) I
>> could get away with three of them.
>>
>> Any thoughts?
>>
>
> Rick;
>
> Don't sell the B&W antenna short. It is more than sufficient for most
> CAP/MARS/Amateur communications. When configured as a NVIS antenna you
> can reach almost everyone in your region. I have worked a distance
> sufficient to cover the upper portion of the US east of the Mississippi.

> Yes the efficiency of the B&W is not on a par with a tuned dipole
> antenna but it offers the flexibility to cover all the CAP/MARS/Amateur
> frequencies with out having to resort to an antenna tuner. Even then the
> relative efficiency of the B&W when compared to an out of resonate
> dipole is more than enough to compensate. This is why CAP/MARS/DOD use
> the B&W for ALE communications.

Can't beat instanteous good enough match.. and the loss is on the order
of 6dB (see Cebik's webpage on T2FDs). pretty darn simple and screwup
proof.

> If you insist in not using the B&W then a fan array of dipoles cut for
> your frequencies of choice can be used. There is some interaction

some interaction? You're going to go insane trying to tune this,
particularly in a field installation if there's any wind blowing to
change the relative positions of the wires and any surrounding stuff. 3
wires works ok to cover 10,15,20,40 and can be tuned reasonably well in
10-15 minutes if you have some sort of antenna analyzer that lets you
sweep it to find the resonances.

> between bands using this type of antenna which complicates the tuning of
> the various dipoles. Be ready for a lot of ups and downs during tuning.

That's for sure.

> There is no best antenna for anything. The standard to which the
> relative efficiency virtually all antenna are compared to is the dipole.
> What ever you do it isn't wrong,just different.

> BTW: I believe the current cost for a B&W 160-6 non stainless steel
> antenna is about $225US from most sources.

And, it would be quite straightforward to build one yourself, if you
have time and materials available. Look up B&W's patent at
http://www.uspto.gov/ for complete construction details. (I think the
patent number is on the B&W website) The patent is expired, by the way,
so you're not infringing to build one. Probably the only hard thing to
come by might be the big resistor, but that can be improvised in many,
many ways. (blocks of charcoal, pipes with salt water, etc.)

197. Question, Colinear design Error?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 00:18:35 UTC
From: amdx <amdx@knology.net>
Message-ID: <10fa8$46b7ba55$18d6b40c$29107@KNOLOGY.NET>
Source record: 37611

Hi all,
I looked at this site and don't see a dimension for the loops,
Ok maybe not an error, but shouldn't the loops have a specific
physical length. Please see the antenna at;

http://martybugs.net/wireless/collinear.cgi

Mike

198. Re: Any homebrew auto-tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 00:54:53 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1186448093.389704.42880@q3g2000prf.googlegroups.com>
Source record: 37612

On 6 Aug, 16:09, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> Hank Zoeller wrote:
> > Rick (W-A-one-R-K-T) wrote:
>
> >> Are there any construction articles around anywhere that describe an
> >> auto-tuner similar to the LDG and SGC offerings?
>
> >http://www.miami.muohio.edu/president/personal/w8zr/eztuner/ezhistory...
>
> That's the stepper motor controlled one.. Note that he used a switch to
> switch between fixed inductors rather than a roller inductor. Also note
> the comment about 3 months of evenings and weekends to build it.
>
>
>
> >http://www.somis.org/bbat.html- Hide quoted text -
>
> - Show quoted text -

Why not make a duplicate tuner of that which is in your radio now
except use
higher power units. You should be able to control this unit using the
existing
circuitry in the radio. Actually a purchased toroid transformer with
several taps would
probably the quickest way to go using a multipole switch.
Art

199. Re: cutting end slots in aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 01:03:45 UTC
From: "Damn Ham"@yahoo.com
Message-ID: <05hfb31ida06cap0igsk2chc7test1hhik@4ax.com>
Source record: 37613

I've used a small table saw with a finish (Trim) cutting blade. Wear
eye protection!

200. Re: Any homebrew auto-tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 01:11:55 UTC
From: dplatt@radagast.org
Message-ID: <rftko4-r0o.ln1@radagast.org>
Source record: 37614

In article <f98225nct1@nntp1.jpl.nasa.gov>,
Jim Lux <james.p.lux@jpl.nasa.gov> wrote:

>An ordinary pot hooked to the shaft probably won't do as a feedback
>device. a) resolution issues, b) life... Typical panel pots have lives
>in the million moves range, which seems like a lot, until you do
>scanning 24/7 with a move every couple seconds.. say 20,000 moves/day
>will burn through a million moves in less than 2 months. Their
>resistance vs position will also change over life (you don't notice this
>on a volume control). There are feedback pots designed for this kind of
>duty that have much longer lives and have high quality resistive
>elements and wipers, but they aren't cheap. You'd probably want to use
>a shaft encoder (and incremental shaft encoders with 1000 pulses/rev are
>easy to come by).

>Any way you look at it, there's a fair amount of electromechanical
>engineering that goes into making a reliable system like this (which is
>why the commercial units are fairly expensive..It's not just because
>they're connected to multi $100K plasma etchers.). In the classic
>antenna tuner case, it's a bit easier, because you don't need high
>quality initial position, just get close enough, and home in on the
>optimum setting for the match.

Good points!

A couple of years ago, I was at a local hamfest/fleamarket, digging through a big pile of relatively-new-looking industrial surplus. I came across a nice air-variable capacitor, and asked the seller for a price... got it for around $5, I think. He then said "Oh, if you like those, I think there's one of them inside one of these things... that one there." Metal case, N connector on one side, high-voltage connector on the other, and a DB-25 for some sort of control connection.

I offered him $15 and he accepted.

After looking at it for a while, and doing some research, I've concluded that it's just what you indicate - a matching unit for a single-frequency RF plasma-etching system. It has what appears to be a fairly spiffy SWR detector, and then an L-match network designed to match a 50-ohm (I assume) RF feed to a lower-impedance load having some amount of reactance. The shunt element is an air-variable cap. The series element is another air-variable cap, in series with a hefty silver-plated coil which feeds the high-voltage connector. These are big cheese-cutter caps with widely-spaced plates. I get the feeling that this matcher was handling quite a lot of power.

Both air-variable caps are turned via geared-down DC motors, and have position-sensing pots. The motors, pots, and SWR detector are all hooked to the DB-25, and I assume that in normal operation there was a control console of some sort at the other end of the cable which had the necessary control logic.

I haven't been able out a way to make real use of it yet, but it's a glorious beast to look at, and I don't think I want to know what it probably cost when it was new.

As to the original query - I suspect that an important part of the practical engineering of an ATU of this sort, is enabling the digital logic to co-exist well with the RF. Not only do you need to keep birdies from the micro out of the RF path (by e.g. idling the processor when not tuning), you also have to keep induced RF on the control and sensing lines from sneaking into the digital logic and causing it to either malfunction, crash entirely, or spew Magic Blue Smoke out of its poor little fried-CMOS brains :-)

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

201. Re: cutting end slots in aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 01:14:01 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <U7ydnS6BlefgVCrbnZ2dnUVZ_q-jnZ2d@giganews.com>
Source record: 37616

Ed wrote:
>
> > That would be ok as long as the combined width of the slots will allow
> > the larger tubing to be clamped to the smaller tubing. I have always
> > just used a hacksaw, and made slots 90° apart, making the slot length
> > about twice the diameter of the tubing.
> > 73.
> > Bryan WA7PRC
>
>
> I was figuring on making only one set of slots, 180 degrees opposite.
> This tubing is quite close fitting (a 9/1000 " difference between
inside
> and outside diamters) and will require very little compression of the
> slotted end to make a tight fit, I would think.
>
>
> Ed K7AAT

If slots 180° apart clamps it fine, you're done. If not, more slots or
widening of the two slots are in order.
Bryan WA7PRC.

202. Re: Question, Colinear design Error?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 01:15:26 UTC
From: dplatt@radagast.org
Message-ID: <emtko4-mkp.ln1@radagast.org>
Source record: 37615

In article <10fa8$46b7ba55$18d6b40c$29107@KNOLOGY.NET>,
amdx <amdx@knology.net> wrote:

> Hi all,
> I looked at this site and don't see a dimension for the loops,

Follow the "bent as detailed here" link.

>Ok maybe not an error, but shouldn't the loops have a specific
>physical length.

According to that link, the loops are 10mm in diameter, or 10*pi mm around.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

203. Re: cutting end slots in aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 01:25:08 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <-LOdnR0CDqiCUSrbnZ2dnUVZ_oaonZ2d@giganews.com>
Source record: 37617

Jay in the Mojave wrote:
> Ed wrote:
> > Just received my order of telescoping aluminum tubing rods from Texas
> > Towers. Sizes range from 1" OD to smaller and all 6 feet long. I
> > plan on using them as a collapsible verticle on the motor home.
> > Before I start hack-sawing away on the ends to cut slots around which
> > I will place my hose clamps, does anyone here have any particular
> > tips or techniques to do this? I figure I'd just cut two slots with
> > a hacksaw about 1" or so deep. If there's a better suggestion, I'd
> > like to hear it before wacking away on my expensive tubes.
> >
> >
> > Ed
> Hello Ed:
>
> You may find that the hand hack saw will be difficult to control and
> keep the cut straight. I use a inexpensive Band Saw, and cut the slots
> approx 1 1/2 inches long. Another consideration is the cut slot width
> maybe to narrow to fully close the outer tubing down on the inner
> tubing. So making a another saw blade width will not hurt. Use a round
> or rat tail file to deburr the inside of the tubing. Chain Saw shaping
> files work quit well for this and are cheap.
>
> You will see cheap crapp hose clamps in the home improvement stores, I
> have anyway. Find a auto parts store thats sell the Breeze brand hose
> clamps.
>
> Jay in the Mojave

Yes - as I learned stainless steel worm-drive hose clamps are *the* way to go. All have a SS band... the cheap ones have a steel screw... the better ones have a SS screw. If you can't find 'em locally, McMaster-Carr (http://www.mcmaster.com/) handles them in more variations than you can think of! Hint: a dab of antiseize compound on the screw threads will keep the screw from galling on the band (and ruining your day).
Bryan WA7PRC

204. Re: Real happiness...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 01:39:16 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <2IKdnR-3j_agUCrbnZ2dnUVZ_gWdnZ2d@comcast.com>
Source record: 37618

<z.m.adel@gmail.com> wrote in message
news:1186439002.758855.102900@d55g2000hsg.googlegroups.com...
> For everyone who search for real happiness...
> Please give some care to these sites :
> http://al-sunnah.com/
> http://www.islam-guide.com/
> http://www.thelastingmiracle.com/eng/
> http://www.harunyahya.com/index.php
> http://www.islamqa.com/special/index.php?subsite=12&ln=eng
>
The year is 1907, one hundred years ago.....but the speaker knew what he was talking about.

Theodore Roosevelt's ideas on Immigrants and being an AMERICAN in 1907.

"In the first place, we should insist that if the immigrant who comes here in good faith becomes an American and assimilates himself to us, he shall be treated on an exact equality with everyone else, for it is an outrage to discriminate against any such man because of creed, or birthplace, or origin. But this is predicated upon the person's becoming in every facet an American, and nothing but an American...There can be no divided allegiance here. Any man who says he is an American, but something else also, isn't an American at all. We have room for but one flag, the American flag... We have room for but one language here, and that is the English language... And we have room for but one sole loyalty and that is a loyalty to the American people."

Theodore Roosevelt 1907
Every American citizen needs to read this KEEP THIS MOVING

205. Re: Real happiness...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 01:47:24 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
Message-ID: <46b7ce75$0$30677$4c368faf@roadrunner.com>
Source record: 37619

```
z.m.adel@gmail.com wrote:
> For everyone who search for real happiness...
> Please give some care to these sites :
> http://al-sunnah.com/
> http://www.islam-guide.com/
> http://www.thelastingmiracle.com/eng/
> http://www.harunyahya.com/index.php
> http://www.islamqa.com/special/index.php?subsite=12&ln=eng
>

Yeah, those guy's in Darfur look real happy. Keep up the good work.
```

206. Re: Looking for advice on CAP/MARS antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 05:10:10 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <S8Tti.39693$fJ5.27114@pd7urf1no>
Source record: 37620

Rick (W-A-one-R-K-T) wrote:

>
> I'm aware of the B&W "radiating dummy load" (TTFD) antennas but I'm not
> quite ready to give up that much efficiency and I'm DEFINITELY not ready
> to blow $300 on one.

I used one for a few years with great success on all bands 80 thru 10.
Don't let the old 'dummy load' stories throw you. You can build one
easily -- there are lots of plans -- just google it as T2FD.

Irv VE6BP

>

207. Re: Looking for advice on CAP/MARS antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 10:04:15 UTC
From: nm5k@wt.net
Message-ID: <1186481055.321725.139440@i13g2000prf.googlegroups.com>
Source record: 37621

On Aug 6, 11:52 am, "Rick (W-A-one-R-K-T)" <get.my.em...@from.qrz.com>
wrote:

>
> I'm aware of the B&W "radiating dummy load" (TTFD) antennas but I'm not
> quite ready to give up that much efficiency and I'm DEFINITELY not ready
> to blow $300 on one.

If I were to spend $300 , I'd rather put it into a decent tuner,
rather than antenna.
Then you could run a single ladder line fed dipole, if a one
wire solution was better.. Also use it with any other antennas
you might mess with.
I'd never pay $300 for one of those antennas, but heck, I wouldn't
pay $300 for any antenna... It's against my religion.
Actually I was too cheap to even pay $300 for a tuner. I got a coil
form
damaged 989c free, and repaired it. :/
I don't use it much, but it's handy to have around.. Can feed about
anything, including ladder line.. It uses a balun, but I haven't
really
had any real trouble with it as far as noticable balance problems.
Some other tuners might be a bit better though if balance is critical.

>
> I don't mind putting up a multi-legged dipole array but I don't want to go
> overboard, and from my calculations (such as they are), I'd need a total
> of SIX (6!!!) dipoles all fed with a common feedline and operating on
> their fundamentals and third or fifth harmonics in order to stand any
> chance at all of covering it all.

Knowing me, thats probably what I would run. Tuning wouldn't be that
big a deal if all the legs are spread out as far apart as possible.
But if you closely stack them, tuning can be a hassle..
But the attraction of this system is that is not really much of a
compromise as far as efficiency is concerned. And instant
QSY too. I'd only bother with the bands I'd know I'd use.
When I was in AF mars back in a previous life, we only used
two freq's for the most part.. Sure they had others listed, but
rarely
used. BTW, yes you can make use of a few other resonant points
that will pop up.. Many will be able to be matched with the radio
tuner. IE: 7mhz can do 21mhz, etc.. Your radio tuner will be pretty
much acting as a line flattener, so the tuning could be off a bit and
still

work ok.
MK

208. Re: Verticals: Earth-Mount vs Roof-Mount

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 11:08:35 UTC
From: nm5k@wt.net
Message-ID: <1186484915.902817.123760@j4g2000prf.googlegroups.com>
Source record: 37622

On Aug 6, 8:06 am, "Richard Fry" <r...@adams.net> wrote:

>
> A NEC-2 model of a 1/4-wave vertical monopole (base at earth level) in the
> AM broadcast band using just four, 1/4-wave radials elevated 12-15 feet
> above a perfect earth shows a peak h-plane gain within tenths of a decibel
> of the theoretical peak value for a 1/4-wave monopole over a perfect ground
> plane, ie, at least 5 dBi.
>

Dunno. I'll have to ponder that a while.. But something doesn't seem
right to
me.. My red flag is going off.. By "perfect ground plane", I assume
you mean
120 radials? I have a hard time seeing 4 low elevated radials within 1
db
of 120 buried radials over real ground. I realize the ratio should be
equal
if converted to "perfect ground" but still, this just doesn't seem
right to me.
I know I've never seen results like that here on real earth. I've
tried four
slightly elevated radials quite a few times on 160m, and I've never
had the
illusion of performance nearly equaling 120 on the ground.
In fact, I've heard of a few others that complained how lousy that
type
of system worked overall, and went to many more buried radials with
better results.
Lets say the two were over poor earth. I would think the 120 radial
system would still be pretty low loss, but the 4 radial system quite
stunted
in comparison. I have a hard time seeing them within a few tenths of a
db
of each other. I dunno if I trust that particular modeling... :/
MK

209. Re: Confused over coax and windom - newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 11:32:41 UTC
From: no@spam.net
Message-ID: <qblgb3d3939f1l5v80lsk240k2m8gmij3m@4ax.com>
Source record: 37623

On older models of Carolina Windoms, the line isolator was simply a piece of RG-8x coax, with one end wrapped around a ferrite rod (and housed inside a piece of PVC).

If you do away with the line isolator and hook your coax directly to the balun (I think they use a 4:1), you should receive signals just like any other dipole. If you do not, I'd say the balun is bad. If you do, then the line isolator is bad.

If this is a new antenna from Radio Works, they will probably make it good. If it's a used antenna you can try to fix it yourself. Take a hacksaw to the PVC and get it apart. You may find a broken or unsoldered wire. You will need some new PVC caps, pipe, glue and such to make new housings, but that shouldn't be difficult.

Kingfish

On Sun, 27 May 2007 13:40:06 +0100, "Andre C" <nospam@sky.com> wrote:

>I am very new at ham radio and find myself confused over an installation of a Carolina windom 80 special.
>
>I attatched a 20m run of coax to the line isolator. When I switch on the rig I get nothing, even on strong BC stations.
I assumed it was a coax prob and striped my plugs down etc. I then discovered that if the shielding was not touching the socket on the rig I got a very good signal. So I assumed there was a short in the coax. I checked the plugs and they seem fine but I note that even when I have just the co-ax plugged in (ie no windom) I get a good signal unless the shielding is connected. (I guess that would make sense though I thought the shielding stopped the centre core picking up a signal.
>
>So where is my problem? Is it the antenna? Is it the ine isolator. (There is no indicator which way round it goes so
I presume it is universal.) I have no tset equipment as yet so an easy solution would be valuable.

210. Re: Looking for advice on CAP/MARS antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 11:44:06 UTC
From: gsm@mendelson.com
Message-ID: <slrnfbgmgn.pnf.gsm@cable.mendelson.com>
Source record: 37624

Rick (W-A-one-R-K-T) wrote:

> I'm aware of the B&W "radiating dummy load" (TTFD) antennas but I'm not
> quite ready to give up that much efficiency and I'm DEFINITELY not ready
> to blow $300 on one.

I think you need to rethink this. A T2FD antenna is a radiating dummy load on frequencies that it is not really cut for. A squashed rombic is more accurate. On frequencies near resonance it is mostly antenna, as the resonance drops it becomes an oddly shaped feedline with a dummy load on the end.

The T2FD was developed by the U.S. Navy and is a popular millitary and government antenna. The B&W one is designed for that market, you can make one very easily from copper wire, strips of insulating material and some resistors. The requirement for the resistor is that it be around 600 ohms and non resonant, so depending upon exactly what you transmit with, and how you transmit, the power requirment may be less than you think.

The resisitor must be able to withstand the peak power and the average power. Carbon resistors tend to withstand much higher peaks for very short times than they are rated. Average power is often far less than peak, for example while AM and RTTY will heat the resistors far more than other modes, CW and SSB will not. One figure I read was 12%.

One book, I have is Practical Wire Antennas, by John Heys, which discusses it in simple, easy to make terms. The book seems to out of print, replaced by Practical Wire Antennas 2 ISBN 1-905086-04-0.

I think it came from his book, but I remember a high power resistor made from a combination of low power resistors in a series parallel form.

I'm sure you could build one for far less than $300, most of the money going to the resistor and if you decided to buy one, a 9:1 balun.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

211. Re: Looking for advice on CAP/MARS antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 13:49:45 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.07.13.49.44.12135@from.qrz.com>
Source record: 37625

On Tue, 07 Aug 2007 05:10:10 +0000, Irv Finkleman wrote:

> I used one for a few years with great success on all bands 80 thru 10.
> Don't let the old 'dummy load' stories throw you.

All I can say is, I was on a CAP HF net a while ago with another station about 10 miles away from here, and we were both working another station about 125 miles north. I was running 5 watts to a cut dipole at 17 feet, and the 10-mile-away station was running 100 watts to a B&W at 25 feet. The faraway station reported that my signal was stronger than his by a comfortable margin.

This morning I was on the same net with the same 10-mile-away station, working another station about 90 miles away. He reported the faraway station as weak but readable, and I was receiving it loud and clear, about 10 over S9.

I realize there are MANY other variables that could account for this and the only real proof will be if I set a T2FD up here and compare them side by side... still, the difference in signal reports is impressive and more than I expected.

212. What is an Explorer Tower?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 14:44:23 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.07.14.44.22.41434@from.qrz.com>
Source record: 37626

I have a chance to buy an Explorer 40-foot telescoping tower, which from the very brief description I have sounds like it might be useful for Field Day and CAP exercises, but I can't find anything on the net that describes it.

It comes with something called an "undertire" mount, which I assume means a tower base with a plate onto which you drive the tire of a vehicle and park it there, to hold it down.

I googled "Explorer tower" and got nothing. The owner reports he bought it from AES but there isn't anything about it on AES's website either.

Anybody know what it might be and where on the net I might be able to find some information on it?

Thanks...

213. Re: Verticals: Earth-Mount vs Roof-Mount

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 14:45:07 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <f9a0ho$e3k$1@aioe.org>
Source record: 37627

<nm5k@wt.net> wrote
> Dunno. I'll have to ponder that a while.. But something doesn't seem
> right to me.. My red flag is going off.. By "perfect ground plane",
> I assume you mean 120 radials?

No, this assumes that the earth is an infinite, flat, perfect conductor -- in which case no radials are needed for a monopole radiator to reach its theoretical performance. But careful measurements done by Brown, Lewis and Epstein in 1937 in New Jersy (conductivity 4 mS/m or less) show that a 1/4-wave monopole using113 buried radials about 0.41 wavelengths each will produce a groundwave field that is within a few percent of that when using a perfect ground.

A 1/4-wave monopole using such a perfect ground has a peak h-plane gain of 5.15 dBi, and will generate a groundwave field of about 314 mV/m at 1 km with 1 kW of applied power.

As a point of calibration, the FCC requires Class B regional AM stations to generate a groundwave r.m.s. field of at least 282 mV/m for 1 kW at 1 km. Using 120 each 1/4-wave buried radials with a 1/4-wave (or somewhat shorter) monopole can do that for almost all real ground conditions.

Class A (50 kW full time) AM stations need to generate at least 362 mV/m r.m.s. for 1 kW at 1 km -- which means they must use a radiator longer than 1/4-wave. Most of them use 195-degree radiators.

> I have a hard time seeing 4 low elevated radials within 1 db
> of 120 buried radials over real ground.

Understandable, but when properly done this is the case, as described in the paper I linked to earlier. Buried radials behave much differently than elevated ones. NEC models also show this.

RF

214. Re: Looking for advice on CAP/MARS antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 15:32:41 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9a3ap$63m$1@nntp1.jpl.nasa.gov>
Source record: 37630

nm5k@wt.net wrote:
> On Aug 6, 11:52 am, "Rick (W-A-one-R-K-T)" <get.my.em...@from.qrz.com>
> wrote:
>
>
>>I'm aware of the B&W "radiating dummy load" (TTFD) antennas but I'm not
>>quite ready to give up that much efficiency and I'm DEFINITELY not ready
>>to blow $300 on one.
>
>
> If I were to spend $300 , I'd rather put it into a decent tuner,
> rather than antenna.

It would be tough to find a tuner that can handle hundreds of watts,
tune in milliseconds, and cost less than $300..

The original poster was talking about *automatic* link establishment,
which implies hands-off operation. The T2FD antennas do that quite
nicely. You're not looking to dig out faint DX from a pileup here, but
establish a link on a designated channel. If the 6-10 dB hit is too
much, you look for a channel where propagation is better.

215. Re: Looking for advice on CAP/MARS antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 15:35:04 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9a3f8$63m$2@nntp1.jpl.nasa.gov>
Source record: 37631

Geoffrey S. Mendelson wrote:
> Rick (W-A-one-R-K-T) wrote:
>
>
>>I'm aware of the B&W "radiating dummy load" (TTFD) antennas but I'm not
>>quite ready to give up that much efficiency and I'm DEFINITELY not ready
>>to blow $300 on one.
>
>
> I think you need to rethink this. A T2FD antenna is a radiating dummy load
> on frequencies that it is not really cut for.

But so what... in ham terms, an antenna that radiates 25% of its
feedline power would be considered egregiously inefficient, but hey,
that's only a 6dB hit. Easy to make it up with an amplifier on Tx, and
on Rx, you're usually external noise limited anyway, so, from a system
standpoint, the T2FD isn't a bad approach.

216. Re: What is an Explorer Tower?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 15:37:46 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9a3ka$65q$1@nntp1.jpl.nasa.gov>
Source record: 37532

Rick (W-A-one-R-K-T) wrote:
> I have a chance to buy an Explorer 40-foot telescoping tower, which from
> the very brief description I have sounds like it might be useful for Field
> Day and CAP exercises, but I can't find anything on the net that describes
> it.
>
> It comes with something called an "undertire" mount, which I assume means
> a tower base with a plate onto which you drive the tire of a vehicle and
> park it there, to hold it down.

Exactly... but don't expect it to stand up to much wind load
40 foot lever arm on a 1 foot plate, and it's pretty easy to lift the
tire off the ground.

I've found that some form of tripod and some shot/sand/water bags is an
easier field expedient (because you can put it anywhere... you don't
have to be right next to the car).

>
> I googled "Explorer tower" and got nothing. The owner reports he bought
> it from AES but there isn't anything about it on AES's website either.
>
> Anybody know what it might be and where on the net I might be able to find
> some information on it?
>
> Thanks...
>

217. Re: Question, Colinear design Error?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 15:39:39 UTC
From: amdx <amdx@knology.net>
Message-ID: <7397b$46b89234$18d6b40c$12028@KNOLOGY.NET>
Source record: 37628

"Dave Platt" <dplatt@radagast.org> wrote in message
news:emtko4-mkp.ln1@radagast.org...
> In article <10fa8$46b7ba55$18d6b40c$29107@KNOLOGY.NET>,
> amdx <amdx@knology.net> wrote:
>
>> Hi all,
>> I looked at this site and don't see a dimension for the loops,
>
> Follow the "bent as detailed here" link.
>
>>Ok maybe not an error, but shouldn't the loops have a specific
>>physical length.
>
> According to that link, the loops are 10mm in diameter, or 10*pi mm
> around.
>
Thanks, Dave
So 10mm*pi is equal to about 1/4 wavelength at 2.437Ghz. I have
spent
about twenty minutes with google and I don't find any info saying that is
the proper
length to phase the sections. What do you think?
Mike

218. Re: Looking for advice on CAP/MARS antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 15:47:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ut4hb39oj2aokhpd4e70vnhho2ops3tbi7@4ax.com>
Source record: 37629

On Tue, 07 Aug 2007 09:49:45 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>He reported the faraway
>station as weak but readable, and I was receiving it loud and clear, about
>10 over S9.

Hi Rick,

The difference is called propagation, and you have the advantage of
being in line-of-sight. Even a Christmas tree bulb can communicate
that far at those antenna heights.

73's
Richard Clark, KB7QHC

219. Indication new knowledge could have an impact on future antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 16:08:07 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9a5df$251$1@nnrp.linuxfan.it>
Source record: 37533

This explains the "Casimir Effect:"
http://en.wikipedia.org/wiki/Kashmir_effect

This indicates that a sound method has been discovered to manipulate it:
http://www.vnunet.com/vnunet/news/2195701/scientists-crack-levitation

Now, one can only speculate as to whether this will have possible
effects on the design/implementation of future antennas ... or possibly
lead to the "discovery" of new/"previously unknown" laws/forces which
have been in play and beyond our vision.

Regards,
JS

220. Re: Question, Colinear design Error?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 16:49:07 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <7o1ui.18366$ug3.1566@trnddc06>
Source record: 37534

"amdx" <amdx@knology.net> wrote in message
news:7397b$46b89234$18d6b40c$12028@KNOLOGY.NET...
>
> "Dave Platt" <dplatt@radagast.org> wrote in message
> news:emtko4-mkp.ln1@radagast.org...
>> In article <10fa8$46b7ba55$18d6b40c$29107@KNOLOGY.NET>,
>> amdx <amdx@knology.net> wrote:
>>
>>> Hi all,
>>> I looked at this site and don't see a dimension for the loops,
>>
>> Follow the "bent as detailed here" link.
>>
>>>Ok maybe not an error, but shouldn't the loops have a specific
>>>physical length.
>>
>> According to that link, the loops are 10mm in diameter, or 10*pi mm
>> around.
>>
> Thanks, Dave
> So 10mm*pi is equal to about 1/4 wavelength at 2.437Ghz. I have
> spent
> about twenty minutes with google and I don't find any info saying that is
> the proper
> length to phase the sections. What do you think?
> Mike

Hi Mike

If you wanted -- you could replace the "loops" with quarterwave stubs to
separate successive halfwave radiators.

Jerry

221. Re: Question, Colinear design Error?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 17:00:18 UTC
From: dplatt@radagast.org
Message-ID: <22lmo4-dec.ln1@radagast.org>
Source record: 37535

In article <7397b$46b89234$18d6b40c$12028@KNOLOGY.NET>,
amdx <amdx@knology.net> wrote:

>> According to that link, the loops are 10mm in diameter, or 10*pi mm
>> around.
>>
> Thanks, Dave
> So 10mm*pi is equal to about 1/4 wavelength at 2.437Ghz. I have
>spent
>about twenty minutes with google and I don't find any info saying that is
>the proper
>length to phase the sections. What do you think?

There are no doubt multiple ways to construct such an antenna. A simple approach would be to use halfwave-long vertical radiating sections, and shorted quarter-wavelength stubs (sticking out to the side, or curled into a near-circular shape) as phasing sections. This would result in "stacked" half-wave radiators. The "Super J-pole" uses this approach.

Another approach for collinears is to use 1/2-wave or 5/8-wave radiating sections, and lumped inductors as phasing sections. An example of this is the Hustler G7-144 (three stacked 5/8 radiators, with lumped inductors between them).

I haven't gone over the design that you posted in detail, but it wouldn't surprise me greatly if the main radiating sections were around 5/8 wavelength, and the phasing loops have enough inductance to create the appropriate phase relationships. Since the phasing sections are inductive loops rather than shorted transmission lines, one would not necessarily expect the "radiating section length, plus total length of wire in the phasing section" to add up to precisely 1 wavelength.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

222. Re: Near field vs Far field measurements at 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 18:47:50 UTC
From: Steve Reinhardt <stevereinhardt@noearthspamlink.net>
Message-ID: <s73ui.32$IP3.25@newsfe06.lga>
Source record: 37536

Jim Lux wrote:
> Steve Reinhardt wrote:
>
>>
>> Well, as I mentioned, this is less about an absolute antenna gain than
>> a figure of merit. Using a dipole as the first, reference transmitting
>> antenna is part of the plan. I may be crazy, but I'm not entirely
>> stupid ;-) (Well, maybe. Time will tell...)
>>
>>> You'll get strong reflections from the ground between the antennas.
>>
>>
>> Ah, yet another thing I have to consider. Since at least two of the
>> tested antennas will be primarily vertical, I was planning to make the
>> test antennas all vertical. So, I can talk myself into believing the
>> ground reflections are part of the real world installations, or I can
>> chuck it all and rely solely upon modeling. One is probably smarter,
>> the other more viscerally stimulating. I leave to the reader to sort
>> out which is which.
>
>
> The tricky thing is that the reflections will have a different effect on
> your reference antenna observations than on your Antenna Under Test
> (AUT) measurements (consider comparing a dipole to dipole, where you get
> a definite ground reflection, vs high gain dish to high gain dish)..
>
> The way to handle this, if you've got time and inclination, is to scan
> one of the antennas in height. That is, set up your AUT (or reference
> dipole), then move the measurement probe vertically over a distance of
> several wavelengths, making measurements at several points. From this,
> you can calculate the effect of the ground reflection.
>
> If you google: Ground Reflection Range Antenna Gain Measurement, you
> might turn up something useful. It's also described in Kraus's book.
>
> You might also want to look up the "three antenna method" which allows
> you to get absolute measurements.
>
>
>
> Jim, W6RMK
Jim,

Thanks for the leads. I will consider them. I'm also thinking of taking a few distance measurements to see if they look like they fit the far field 1/r*r criteria. If the measurements are too far off, then I'll assume I've got a bad test criteria, and I'll rethink the whole shebang.

73,
Steve
W1KF

223. Re: Indication new knowledge could have an impact on future antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 20:42:03 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <kf2dneAB8LrHRCXbRVnyhAA@bt.com>
Source record: 37537

"John Smith I" <assemblywizard@gmail.com> wrote in message
news:f9a5df$251$1@nnrp.linuxfan.it...
> This explains the "Casimir Effect:"
> http://en.wikipedia.org/wiki/Kashmir_effect
>
> This indicates that a sound method has been discovered to manipulate it:
> http://www.vnunet.com/vnunet/news/2195701/scientists-crack-levitation
>
> Now, one can only speculate as to whether this will have possible
> effects on the design/implementation of future antennas ... or possibly
> lead to the "discovery" of new/"previously unknown" laws/forces which
> have been in play and beyond our vision.
>
> Regards,
> JS

John

So you tie an antenna wire to a gecko and get it to run up the nearest tall
object? :-)

Mike G0ULI

224. Re: Indication new knowledge could have an impact on future antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 20:42:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fklhb3969r9em3lbmpiurch6c0e9iibar4@4ax.com>
Source record: 37538

On Tue, 07 Aug 2007 09:08:07 -0700, John Smith I
<assemblywizard@gmail.com> wrote:

>This explains the "Casimir Effect:"
>http://en.wikipedia.org/wiki/Kashmir_effect
>
>This indicates that a sound method has been discovered to manipulate it:
>http://www.vnunet.com/vnunet/news/2195701/scientists-crack-levitation

Remember Pons and Fleishman?

>Now, one can only speculate as to whether this will have possible
>effects on the design/implementation of future antennas ... or possibly
>lead to the "discovery" of new/"previously unknown" laws/forces which
>have been in play and beyond our vision.

Gad, just what we need is more existential fodder for Arthur (except
you leaped to an antenna connection before he could opine "throw away
the text books").

Future nano antennas? At this scale, there is nothing so amusing as
those in, over their heads. It may shock many to discover that
resonance becomes decoupled from scaling at this -um- scale. This
isn't your dad's quarterwave monopole anymore.

Another message from Western Union, the Casimir effect was well known
CENTURIES ago to sailors. It was only myopic scientists who
re-discovered it under their microscope and put a label to it in spite
of this common knowledge.

73's
Richard Clark, KB7QHC

225. Re: Looking for advice on CAP/MARS antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 21:01:53 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.07.21.01.53.57606@from.qrz.com>
Source record: 37539

On Tue, 07 Aug 2007 08:47:33 -0700, Richard Clark wrote:

> On Tue, 07 Aug 2007 09:49:45 -0400, "Rick (W-A-one-R-K-T)"
> <get.my.email@from.qrz.com> wrote:
>
>>He reported the faraway
>>station as weak but readable, and I was receiving it loud and clear, about
>>10 over S9.
>
> Hi Rick,
>
> The difference is called propagation, and you have the advantage of
> being in line-of-sight. Even a Christmas tree bulb can communicate
> that far at those antenna heights.

Good afternoon, Richard.

I guess I wasn't clear. Stations A (me) and B are 10 miles apart.
Station C is 90 miles from both stations A and B, broadside to a line
between stations A and B. Station A runs a cut dipole at 17 feet and
Station B runs a B&W at 25 feet. Station C comes in weak at Station B
(with the B&W) but strong at Station A (with the cut dipole).

I suppose that propagation between Stations C and A will be different than
between C and B, but usually not that different...

226. Re: What is an Explorer Tower?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 21:04:42 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.07.21.04.42.659200@from.qrz.com>
Source record: 37540

On Tue, 07 Aug 2007 08:37:46 -0700, Jim Lux wrote:

> Exactly... but don't expect it to stand up to much wind load
> 40 foot lever arm on a 1 foot plate, and it's pretty easy to lift the
> tire off the ground.

Actually I was planning to use it with my motorhome, under the rear tire... good luck getting THAT tire up off the ground.

Still need some info on the tower / mast, though... unfortunately the owner is 120 miles away from here so I can't just drive up there and take a look...

227. Re: Near field vs Far field measurements at 2M

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 21:30:10 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9ao92$ic0$1@nntp1.jpl.nasa.gov>
Source record: 37545

```
Steve Reinhardt wrote:
> Jim Lux wrote:
>
>> Steve Reinhardt wrote:
>>
>>>
>>> Well, as I mentioned, this is less about an absolute antenna gain
>>> than a figure of merit. Using a dipole as the first, reference
>>> transmitting antenna is part of the plan. I may be crazy, but I'm not
>>> entirely stupid ;-) (Well, maybe. Time will tell...)
>>>
>>>> You'll get strong reflections from the ground between the antennas.
>>>
>>>
>>>
>>> Ah, yet another thing I have to consider. Since at least two of the
>>> tested antennas will be primarily vertical, I was planning to make
>>> the test antennas all vertical. So, I can talk myself into believing
>>> the ground reflections are part of the real world installations, or I
>>> can chuck it all and rely solely upon modeling. One is probably
>>> smarter, the other more viscerally stimulating. I leave to the reader
>>> to sort out which is which.
>>
>>
>>
>> The tricky thing is that the reflections will have a different effect
>> on your reference antenna observations than on your Antenna Under Test
>> (AUT) measurements (consider comparing a dipole to dipole, where you
>> get a definite ground reflection, vs high gain dish to high gain dish)..
>>
>> The way to handle this, if you've got time and inclination, is to scan
>> one of the antennas in height. That is, set up your AUT (or reference
>> dipole), then move the measurement probe vertically over a distance of
>> several wavelengths, making measurements at several points. From
>> this, you can calculate the effect of the ground reflection.
>>
>> If you google: Ground Reflection Range Antenna Gain Measurement, you
>> might turn up something useful. It's also described in Kraus's book.
>>
>> You might also want to look up the "three antenna method" which allows
>> you to get absolute measurements.
>>
>>
>>
```

>> Jim, W6RMK
>
> Jim,
>
> Thanks for the leads. I will consider them. I'm also thinking of
> taking a few distance measurements to see if they look like they fit
> the far field 1/r*r criteria. If the measurements are too far off, then
> I'll assume I've got a bad test criteria, and I'll rethink the whole
> shebang.

That's the other way... make measurements at the same heights, but
moving the antennas apart... overall, you know it has to be a 1/r^2
relation, so you can fit a straight line to the bumps.

>
> 73,
> Steve
> W1KF

228. Re: Indication new knowledge could have an impact on future antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 21:31:12 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <f9aob4$j98$1@news.service.uci.edu>
Source record: 37541

Richard Clark wrote:
> Another message from Western Union, the Casimir effect was well known
> CENTURIES ago to sailors. It was only myopic scientists who
> re-discovered it under their microscope and put a label to it in spite
> of this common knowledge.

Centuries ago it was nearly impossible for sailors to find anyone who
would publish their nanoelectronics research.

:-)
ac6xg

229. Re: What is an Explorer Tower?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 21:37:18 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9aome$ih9$1@nntp1.jpl.nasa.gov>
Source record: 37546

Rick (W-A-one-R-K-T) wrote:
> On Tue, 07 Aug 2007 08:37:46 -0700, Jim Lux wrote:
>
>
>>Exactly... but don't expect it to stand up to much wind load
>>40 foot lever arm on a 1 foot plate, and it's pretty easy to lift the
>>tire off the ground.
>
>
> Actually I was planning to use it with my motorhome, under the rear
> tire... good luck getting THAT tire up off the ground.

One might think so at first glance, but here goes with a short scenario (I was looking at using the roof rack on my car to stabilize a portable mast)..
http://home.earthlink.net/~w6rmk/antenna/mastcar.htm has details..

40 ft mast 2" in diameter in a 80 mi/hr wind has a moment of 2200 ft lb. if the distance from fulcrum to tire is 1 foot, then the up force on the tire is 2200 lb.

So, your RV won't be lifted up, but my 3000 lb car would.

And, of course, if it's only a 40 mi/hr wind the load is 1/4, etc.

In practice, most people use a fairly lightweight mast and let it fail before it damages the car.

230. Re: Indication new knowledge could have an impact on future antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 21:48:16 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9apb9lds1@nnrp.linuxfan.it>
Source record: 37542

Richard Clark wrote:

> ...
> Another message from Western Union, the Casimir effect was well known
> CENTURIES ago to sailors. It was only myopic scientists who
> re-discovered it under their microscope and put a label to it in spite
> of this common knowledge.
>
> 73's
> Richard Clark, KB7QHC

Well, did they claim to have levitated atomic sized particles?

Regards,
JS

231. Re: Indication new knowledge could have an impact on future antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 21:52:13 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9apimlds2@nnrp.linuxfan.it>
Source record: 37543

Mike Kaliski wrote:

> ...
> So you tie an antenna wire to a gecko and get it to run up the nearest tall
> object? :-)
>
> Mike G0ULI

So? Your claim is the Casimir Effect only has domain over atomic sized particles and "possibly" larger? Interesting, I would take your bet ... if it affects atomic sized particles, it will be found to affect smaller; and bigger, I wonder? But, apparently, that/those questions are being posed ...

Regards,
JS

232. Re: Indication new knowledge could have an impact on future antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 21:53:59 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9aplvlds3@nnrp.linuxfan.it>
Source record: 37544

Jim Kelley wrote:

> Centuries ago it was nearly impossible for sailors to find anyone who
> would publish their nanoelectronics research.
>
> :-)
> ac6xg

Jim:

I am busting a gut here, the humor is greatly appreciated.

Regards,
JS

233. Re: Indication new knowledge could have an impact on future antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 22:35:15 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9as3brhv1@nnrp.linuxfan.it>
Source record: 37547

Mike Kaliski wrote:

>
> So you tie an antenna wire to a gecko and get it to run up the nearest tall
> object? :-)
>
> Mike G0ULI

Yanno? Come to think of it, if they really do have a crashed alien
craft or two, and are reverse engineering 'em, you'd just have to expect
something like this to develop somewhere at sometime; wouldn't ya? <grin>

Regards,
JS

234. Re: Indication new knowledge could have an impact on future antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 23:01:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f9thb3hfj4qu9t8pe03iclicqglii3cf6r@4ax.com>
Source record: 37548

On Tue, 07 Aug 2007 14:48:16 -0700, John Smith I
<assemblywizard@gmail.com> wrote:

>Richard Clark wrote:
>
> > ...
>> Another message from Western Union, the Casimir effect was well known
>> CENTURIES ago to sailors. It was only myopic scientists who
>> re-discovered it under their microscope and put a label to it in spite
>> of this common knowledge.
>>
>> 73's
>> Richard Clark, KB7QHC
>
>Well, did they claim to have levitated atomic sized particles?

Talk about the claims of Tritonic minnows.

The Casimir effect is a specious example of a larger effect. Centuries
ago (and even now, if anyone cares to attempt it), when ships are
side-by-side, in close proximity, a difference in energy level
pressing on the ship's hulls is found to draw them together into
collision.

For others: The wave energy in the sea comes in many wavelengths and
is equally distributed upon the surface of a large ship (no appeals to
nanotechnology is required to understand any of this). As a result,
the combined force is washed out, so to speak. The net force of all
energies does not otherwise move nor change the course of a ship.
However, when two ships are running parallel tracks close together,
the space between them limits the frequency of wavelengths between
them. There is thus a smaller range of energies present between the
ships. The balance in energies applied to all sides of either ship is
lost. That loss is found in the parallel faces of the hulls and the
remaining original forces cause the ships to draw together and
collide.

Now, what has this got to do with nanotechnology? NADA.

What has this got to do with antennas? NADA.

What sort of lens would reverse this effect in ships to push them
apart (so called levitation of the Super Man comix)? The reader can
rest well to imagine another shaggy dog proposal.

73's
Richard Clark, KB7QHC

235. Re: Indication new knowledge could have an impact on future antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 23:24:21 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9auvdsag1@nnrp.linuxfan.it>
Source record: 37549

Richard Clark wrote:

> ...
> 73's
> Richard Clark, KB7QHC

Nice fairytale; and given all the time at sea, those sailors certainly would have had the time to dream it up; and, it is easy for one to imagine as holding water.

However, the rising and falling of the ships would create a "pumping effect" between the said ships ...

As, the ships rise on the wave, the ships tend to be "pushed" together by the fact that water on all the outsides of the ships finds it easier to flow up to, and onto, the ships, leaving a "partial vacuum" in between the ships due to the fact water "flowing in" between the ships faces more resistance getting in their.

Now, as the wave subsides, the ships are "held together" by the fact the water "flowing out" between the ships faces much more resistance than the water flowing away on the outsides ... the ships eventually end up touching.

While the Casimir Effect may, or may not, relate to this phenomenon in some esoteric and abstract way--I rather doubt it! <silly grin>

QUIT PULLING RICHARD! I FEEL MY ONE LEG, YOU ARE PULLING, GETTING LONGER ALREADY. :-)

Regards,
JS

236. Re: Indication new knowledge could have an impact on future antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-07 23:39:33 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <meidnUkVzrponyTbRVnyhAA@bt.com>
Source record: 37550

"John Smith I" <assemblywizard@gmail.com> wrote in message
news:f9as3brhv1@nnrp.linuxfan.it...
> Mike Kaliski wrote:
>
> >
> > So you tie an antenna wire to a gecko and get it to run up the nearest
tall
> > object? :-)
> >
> > Mike G0ULI
>
> Yanno? Come to think of it, if they really do have a crashed alien
> craft or two, and are reverse engineering 'em, you'd just have to expect
> something like this to develop somewhere at sometime; wouldn't ya? <grin>
>
> Regards,
> JS
>
Nah, the old methods are the best.
1. Attach antenna wire to gecko.
2. Get your gecko to climb as high as needed.
3. Key up with a kilowatt.
4. Antenna is now secured with lossy carbon resistor for a lovely wide
bandwidth.
Simple.

Geckos have had sticky but dirt resistant feet for millennia. There was an announcement over a year ago that some new plastic compound had been developed to duplicate the effect. It all relies on the attraction between closely spaced molecules. I guess someone needed to find a method of peeling it off after it had stuck firmly. Applying an electromagnetic field in the correct manner would break the atomic level attraction between the materials. Don't know how the geckos do it though. Maybe they have a charge generator like an electric eel?

Mike G0ULI

237. Re: Indication new knowledge could have an impact on future antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 00:03:39 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9b193$5ae$1@nnrp.linuxfan.it>
Source record: 37551

Mike Kaliski wrote:

> ...
> Mike G0ULI

Well, I guess it is possible--the aliens could be stealing our technology; in much the same way as, we collect artifacts of primitive cultures ...

Regards,
JS

238. Re: Indication new knowledge could have an impact on future antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 00:06:45 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9b1et$5ae$2@nnrp.linuxfan.it>
Source record: 37552

John Smith I wrote:

> ...
> QUIT PULLING RICHARD! I FEEL MY ONE LEG, YOU ARE PULLING, GETTING
> LONGER ALREADY. :-)
>
> Regards,
> JS

Darn, I always forget something. Air, being a fluid, exerts a similar action also; and, although to a lesser extent, is a factor also ... for the "purists."

Regards,
JS

239. Re: Indication new knowledge could have an impact on future antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 00:20:15 UTC
From: dplatt@radagast.org
Message-ID: <vqeno4-t56.ln1@radagast.org>
Source record: 37554

In article <meidnUkVzrponyTbRVnyhAA@bt.com>,
Mike Kaliski <michael.kaliski(remove this)@tesco.net> wrote:

>Nah, the old methods are the best.
>1. Attach antenna wire to gecko.
>2. Get your gecko to climb as high as needed.
>3. Key up with a kilowatt.
>4. Antenna is now secured with lossy carbon resistor for a lovely wide
>bandwidth.

Is that... roasted newt?!?!?

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

240. Re: Questions about mast mounted pre-amps.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 00:28:07 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <o9fno4-cgr.ln1@p400bob.personal.cox.net>
Source record: 37553

Yeah thats always bad. I chose my XYL to fit in with my hobby <grin>

Of course height isn't as important for sat work than it is for terrestrial. You can place small directive arrays on the rooftop and steer them easily. I realize you are already Lindenblad bound but 2-3 element quads or helix antennas are still quite unobtrusive. Another possibility is the egg beater type construction that with a simple azimuth rotator will give you a few more dB gain than the "full" omni. I personally went from a cross dipole to a Lindenblad in my first satellite experiments with RS10. Was only running 3W SSB on 2m and it was copyable on 10m down to 5 degrees elevation.

But back on the preamp front. I saw Alan's recommendation for the SSB Electronics unit. No doubt there is a good reason for such a "high" price, but I think I'd stick to building one from cheapish dual gate FETs. Granted the NF isn't as low but with average rigs running 4-12dB the improvement will still be significant. (Some rigs benefit from changing PIN diode T/R switching to a coaxial relay. It really is surprising) You may even want to do the maths of determining how much RX signal you really need. A satellite is of course listening for signals against a large amount of terrestrial noise whereas you are looking up at essentially a cold RF sky. One of the reasons now doubt for the disparity in ground station vs satellite RF output power.

Down East Microwave do a number of LNA's;

http://www.downeastmicrowave.com
and a 2m device;
http://www.downeastmicrowave.com/PDF/2mlna.PDF

I remember hearing good things about the company maybe 10 years ago.
They are a around $30-60 for RX only applications.

Sorry I ran out of time web searching. They aren't as prolific as I thought!

I apologize for waffling!

Cheers Bob

Rob Brown wrote:

> Bob,
> Thanks for the info.

241. Re: Looking for advice on CAP/MARS antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 01:16:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <026ib3t21i3qa29ai0pvm0ij3ipbtv7hld@4ax.com>
Source record: 37555

On Tue, 07 Aug 2007 17:01:53 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>I guess I wasn't clear.

Hi Rick,

Quite so by the lengthier description offered.

>I suppose that propagation between Stations C and A will be different than
>between C and B, but usually not that different...

It would be a curious exception, indeed.

I can imagine the difference in A/B received signal strengths is found
in the tuner at A.

73's
Richard Clark, KB7QHC

242. Re: Indication new knowledge could have an impact on future antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 01:48:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fj6ib3leioisdn0ih1ss4jqfmm5dl4imc1@4ax.com>
Source record: 37556

On Tue, 07 Aug 2007 16:24:21 -0700, John Smith I
<assemblywizard@gmail.com> wrote:

>While the Casimir Effect may, or may not, relate to this phenomenon in
>some esoteric and abstract way--I rather doubt it! <silly grin>

I've seen that silly grin before my strikers went to the rail to feed
the fish.

"Esoteric and abstract" is in the nano-tech embroidery added to a
common occurrence. Simply put, if you cannot explain the Casimir
effect (I note you appeal to others through links) in terms other than
mine of energy and wavelength; then your rejection is a wan flick from
an effete wrist.

From someone who has worked before the mast:
http://home.comcast.net/~kb7qhc/antennas/navy/Mast.JPG
(some may note that this post even adds value for examples of
antennas!)

73's
Richard Clark, KB7QHC

243. Re: What is an Explorer Tower?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 01:57:05 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <se6dndsmC-VfuSTbnZ2dnUVZ_gmdnZ2d@giganews.com>
Source record: 37557

Rick wrote:
> I have a chance to buy an Explorer 40-foot telescoping tower, which from
> the very brief description I have sounds like it might be useful for Field
> Day and CAP exercises, but I can't find anything on the net that describes
> it.
>
> It comes with something called an "undertire" mount, which I assume means
> a tower base with a plate onto which you drive the tire of a vehicle and
> park it there, to hold it down.
>
> I googled "Explorer tower" and got nothing. The owner reports he bought
> it from AES but there isn't anything about it on AES's website either.
>
> Anybody know what it might be and where on the net I might be able to find
> some information on it?
>
> Thanks...

Hi Rick,

Some years ago, I fabricated a 40' tiltup/rotatable mast from common 1" plumbing pipe specifically for FD. Yes, it needs to be guyed (two guysets). The mast supports a Cushcraft A3S 20/15/10m yagi. The top guys serve double-duty as 80 & 40m inverted vees (80m is a 4-wire cage, and covers nearly the entire band w/o a tuner).

Some metal fabrication is required (drilling & light welding) but it's not too involved. A single person can assemble & tilt the mast up/down though more hands makes it go faster. Some photos and a video clip are here: http://tinyurl.com/38v9wn (the video clip is the last thumbnail image). Let me know if you need more info.

73,
Bryan WA7PRC

244. Re: Indication new knowledge could have an impact on future antennas ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 03:08:52 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9bc4c$547$1@nnrp.linuxfan.it>
Source record: 37558

Richard Clark wrote:

> ...
> From someone who has worked before the mast:
> http://home.comcast.net/~kb7qhc/antennas/navy/Mast.JPG
> (some may note that this post even adds value for examples of
> antennas!)
>
> 73's
> Richard Clark, KB7QHC

Aye, aye Captain; it is Moby Dick we pursue--to the ends of the earth,
and Davey Jones Locker, if necessary!
<silly grin wiped clean, replaced by straight face>

Regards,
JS

245. Re: Looking for advice on CAP/MARS antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 04:36:49 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.08.04.36.49.169646@from.qrz.com>
Source record: 37559

On Tue, 07 Aug 2007 18:16:11 -0700, Richard Clark wrote:

> I can imagine the difference in A/B received signal strengths is found
> in the tuner at A.

Ah, but "A" is me, and my dipole is cut for the frequency ... no tuner involved. The 10-mile-away station with the B&W also has no tuner. So, tuners don't enter into the picture for this particular test.

246. Iron Powder Toroid - weatherproof?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 04:53:18 UTC
From: mcclements@gmail.com
Message-ID: <1186548798.437893.162620@g4g2000hsf.googlegroups.com>
Source record: 37560

Ok, dumb question. Can a Iron Powder Toroid be used outside without being weatherproofed? Can it be painted with enamel and the used that way? -Scott, WU2X

247. Re: Iron Powder Toroid - weatherproof?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 05:03:04 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9biqg$kg0$1@nnrp.linuxfan.it>
Source record: 37561

mcclements@gmail.com wrote:
> Ok, dumb question. Can a Iron Powder Toroid be used outside without
> being weatherproofed? Can it be painted with enamel and the used that
> way? -Scott, WU2X
>

If that is a dumb question, that makes two dumb people we have found,
you and I.

I finally settled on a vinyl spray paint, the type found in auto stores
to "restore" vinyl dash boards from the effect of solar rays. I could
find no metal compounds on the list of ingredients and took a chance.
Seems to work just fine. Balun is in an enclosure which keeps most
moisture out, condensation is my major worry.

If I ran high power into the balun--running a high swr, I would begin to
worry about the heat tolerance of the vinyl spray (wire insulation is
high temp enamel.)

I am glad you posed this question, others might have better methods, I
have never thought to ask.

Regards,
JS

248. Re: Iron Powder Toroid - weatherproof?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 05:33:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13bild0quqrio03@corp.supernews.com>
Source record: 37562

mcclements@gmail.com wrote:
> Ok, dumb question. Can a Iron Powder Toroid be used outside without
> being weatherproofed? Can it be painted with enamel and the used that
> way? -Scott, WU2X

You often use powdered iron when you need high Q in an inductor. Water between turns can seriously degrade the Q. Painting with enamel might lower the Q somewhat, but nowhere near as much as water. To maintain the best Q, you need to keep water well away (say, a couple of times the turn spacing) from the wires. No physical harm will come to the core from being outside in the weather.

Roy Lewallen, W7EL

249. Re: Looking for advice on CAP/MARS antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 06:11:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0inib358khndbdpt7h1m5899k28de9g1ad@4ax.com>
Source record: 37563

On Wed, 08 Aug 2007 00:36:49 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>On Tue, 07 Aug 2007 18:16:11 -0700, Richard Clark wrote:
>
>> I can imagine the difference in A/B received signal strengths is found
>> in the tuner at A.
>
>Ah, but "A" is me, and my dipole is cut for the frequency ... no tuner
>involved. The 10-mile-away station with the B&W also has no tuner. So,
>tuners don't enter into the picture for this particular test.

Ahï¿½, but the sense of tuner is found in "tuned" (as in "my dipole is
cut for the frequency").

73's
Richard Clark, KB7QHC

250. Re: Jumpers across tower sections

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 11:35:21 UTC
From: Nate Bargmann <n0nb.DO.NOT.SPAM@ME.networksplus.net>
Message-ID: <pan.2007.08.08.11.35.24@ME.networksplus.net>
Source record: 37564

On Mon, 06 Aug 2007 14:00:08 -0400, Rick (W-A-one-R-K-T) wrote:

> For lightning protection, is it generally considered good practice to
> install heavy-gauge copper wire jumpers across each junction point
> between tower sections?

My reading of the Polyphaser technical papers is that bonding between
sections is not done for many of the reasons already mentioned.

> My guess is that the electrical connection between one tower section and
> the next might be somewhat variable, especially if the tower sections
> weren't new when the tower was assembled.

So long as the galvanized metal surfaces are clean when assembled, there
should be adequate bonding between the two.

73, de Nate >>

--

"The optimist proclaims that we live in the best of all possible worlds,
the pessimist fears this is true."

251. Blame the Flooder, KB9RQZ

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 11:54:55 UTC
From: Ralph <anon@anon>
Message-ID: <1590bq.d1n.19.1@news.alt.net>
Source record: 37565
Cross-posted to: alt.satellite.direcpc,rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy

<Mark@TayleorRobesin.org> wrote in message
news:tigib3991ktqf8g8lnnvj0rmfenhonrglo@4ax.com...
> On Tue, 07 Aug 2007 23:38:29 -0400, KU2S <ku2s@arast.org> wrote:
>
>> As I read these posts, I wonder just how old you people really
>>are. I haven't seen such name-calling and chest-thumping since I
>>graduated from High School back in the 70's. I've been monitoring
>>this newsgroup for a couple of years now, and all I can recall seeing
>>is one post after another comprising of nothing more than personal
>>attacks and filthy language. It's not just here, but also in several
>>other Ham and CB related newsgroups. Damn, people.. the purpose of
>>Amateur radio and CB radio is to communicate. All you folks seem
>>interested in doing is instigating...
>

The principle miscreant amongst the few "actors" is Mark Morgan, KB9RQZ,
himself. When flooding the Amateur radio groups with hundreds of daily
nonsense posts, can you be at all surprised that more than a few of the
other Usenet Hams become angry?
Mr. Morgan, of Chassell, Michigan, has single-handedly turned the radio
newsgroups into cesspools while myopically claiming that he is the "victum"
and is defending his non-existent "honor".
During Mr. Morgan's forced absence a few days ago while Tera News was down,
the groups returned to their relatively normal, peaceful state. That alone
is all the barometer one needs on this topic.

252. Re: Iron Powder Toroid - weatherproof?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 13:20:14 UTC
From: Chuck <no.spam@no.spam.at.all>
Message-ID: <1186579082_10665@sp12lax.superfeed.net>
Source record: 37566

Roy Lewallen wrote:

>
> You often use powdered iron when you need high Q in an inductor. Water
> between turns can seriously degrade the Q. Painting with enamel might
> lower the Q somewhat, but nowhere near as much as water. To maintain the
> best Q, you need to keep water well away (say, a couple of times the
> turn spacing) from the wires. No physical harm will come to the core
> from being outside in the weather.
>

Here's a link to an old Boonton paper
that describes measurement of inductor Q
at 400 MHz (see page 3) when the
inductor is immersed in tap water. In
Boonton's experiment, no appreciable
effect on Q was noted, except when NaCl
was added to the water. ;-)

Is the greater effect of water on a
powdered iron inductor caused by the
much higher permeability of the iron
than of the air-wound coil Boonton used?

Anyway, it's an interesting paper.

http://www.hparchive.com/Boonton/BRC-The-Notebook-28.pdf
BRC-The-Notebook-28.pdf (application/pdf
Object)

73,

Chuck

----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

253. Vertical Whip Antennas And Gain Question ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 16:07:27 UTC
From: Robert11 <rgsros@notme.com>
Message-ID: <182dnXhbBO9JdCTbnZ2dnUVZ_jydnZ2d@comcast.com>
Source record: 37567

Hello,

Am a real novice when it comes to antenna theory, but am trying to learn. if anyone could explain the following for me, even though I admit it's really awfully basic, would be most appreciative.

Am interested in receiving only, around the Marine VHF bands of 156 MHz, or so.

I understand that "Gain" is achieved in many antenna configurations by making them very directional.
My understanding is that you in effect re-shape the lobes to be prominent along one axis, and minimal at right angles.

So, how is Gain achieved in a
vertical whip (the specs usually mention 3 or even 6 db), or the rubber-duckie, types of antennas used so often on handheld scanners (or mounted to recreational boats) ? They are, I believe, truly omni directional.

Also, are there vertical whip antennas that are directional, with "gain" perhaps ?

Thanks,
Bob

254. FWT antennas provide full gain antennas in 1/8 the volume was Re: Help with Wifi antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 17:41:45 UTC
From: LVMarc <LVMarc@att.net>
Message-ID: <Ninui.33738$xx1.6380@newsfe09.phx>
Source record: 37568
Cross-posted to: comp.sys.laptops,sci.electronics.design,rec.radio.amateur.antenna

Jasen Betts wrote:
> On 2007-07-27, Rich Grise <rich@example.net> wrote:
>
>>On Thu, 26 Jul 2007 09:13:02 +0100, Jeff wrote:
>>
>>>> Well.. not all the 802.11b/g channels are in the amateur band, and even
>>>
>>>>there, there is a power limit (transmitter output power, though, not
>>>>EIRP), so you could conceivably fire up your 1500 Watt transmitter into
>>>>a 20dBi antenna and blast away.
>>>>
>>>
>>>That is what the moonbounce operators do, but with more antenna gain!!
>>>
>>>
>>>>There is the other rule about minimum power needed for communication,
>>>>though.
>>>
>>>Again moonbounce is not uncommon in the 13cms band.
>>
>>Yikes! I was just doing a little calculating, and you could put a 20 dB
>>Yagi in your shirt pocket! =:-O
>
>
> how many elements ?
>
> I saw a stacked yagi 2.4GHz antenna when I was in the pay-tv business
> iirc 2 rows of 25 elements. dunno what gain it had.
>
> Bye.
> Jasen

for miniaturizing wi fi wi max or any band in the 100 MC to 10GC range,
You can use FWT antennas. FWT(Focused Wave antennas) miniaturize and
ruggedize antennas by embedding them into an engineered dielectric, when
hardened becomes and integral part of the antenna. For the real high
gain antennas, the mechanical support for the extra eleemtns is provided
by the intirinisic design of FWT antennas. Built in Balun and have
begun to integrate electronic onto he body of the fwt antenna. this
eliminates the rf connector, looses and performance degradation that
occurs right at the antenna to first stage interconnection!

Best regards,

Marc Popek

www.fwt.niat.net
http://www.youtube.com/profile?user=LVMarc

255. Re: Vertical Whip Antennas And Gain Question ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 17:44:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r3vjb3p4vu2tl24j5oi95vbugg9545eqbr@4ax.com>
Source record: 37569

On Wed, 8 Aug 2007 12:07:27 -0400, "Robert11" <rgsros@notme.com>
wrote:

>So, how is Gain achieved in a
>vertical whip (the specs usually mention 3 or even 6 db),

Hi Bob,

This is usually achieved through co-linear elements. That is, one
vertical element stacked upon (above) the other, inline. Many such
"gain" antennas' details of construction are obscured by a fiberglass
shell.

>or the
>rubber-duckie, types of antennas used so often on handheld scanners (or
>mounted to recreational boats) ? They are, I believe, truly omni
>directional.

Quite so. Unfortunately there is more to "gain" (or effective
sensitivity) than co-linear elements at the frequencies you are
interested in. More important is height which can make a substantial
difference in perceived "gain." If you invest any of your interest in
raising an antenna, it would reward you to also hoist a co-linear
design instead of a rubber duckie.

>Also, are there vertical whip antennas that are directional, with "gain"
>perhaps ?

As stated, the co-linears. They are common.

Now, as to the need for gain. The marine band is principally limited
to line-of-sight transmissions - hence the advice for height. The
higher you are, the further you can see. The earth's horizon can be
expressed as being the square root (twice the height in feet) miles
away. So, if you are using a rubber duckie, that horizon would be
roughly 3.5 miles away (barring obstructions). If you hoisted it 30
feet in the air, the horizon would be about 8 miles away, and less
likely to be obstructed (except at the far end). If your 30 foot
antenna is listening to a ship's antenna at 30 feet, your greatest
range would be roughly 16 miles. An airplane at 30,000 feet would
stay within your range out to 245 miles.

Without obstructions, you could probably hear them (airplanes or
ships) quite clearly even if they transmitted only 100mW of power.
Gain would be unnecessary.

However, we can anticipate variables to this such as those neglected obstructions, and what would be called propagation. The signal becomes weaker by degrees, or by huge plunges. Some of this can be made up for by more power by the transmitter, or more gain in either/both antennas.

73's
Richard Clark, KB7QHC

256. dlody th e frreak

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 18:23:45 UTC
From: Mark@TayleorRobesin.org
Message-ID: <6e2kb3de55dmdpv38032d3m12o4f16o8d2@4ax.com>
Source record: 37570
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy

On Wed, 8 Aug 2007 07:54:55 -0400, "Ralph" <anon@anon> wrote:

>
><Mark@TayleorRobesin.org> wrote in message
>news:tigib3991ktqf8g8lnnvj0rmfenhonrglo@4ax.com...
>> On Tue, 07 Aug 2007 23:38:29 -0400, KU2S <ku2s@arast.org> wrote:
>>
>>> As I read these posts, I wonder just how old you people really
>>>are. I haven't seen such name-calling and chest-thumping since I
>>>graduated from High School back in the 70's. I've been monitoring
>>>this newsgroup for a couple of years now, and all I can recall seeing
>>>is one post after another comprising of nothing more than personal
>>>attacks and filthy language. It's not just here, but also in several
>>>other Ham and CB related newsgroups. Damn, people.. the purpose of
>>>Amateur radio and CB radio is to communicate. All you folks seem
>>>interested in doing is instigating...
>>
>
>The principle miscreant amongst the few "actors" is Mark Morgan, KB9RQZ,
>himself. When flooding the Amateur radio groups with hundreds of daily
>nonsense posts, can you be at all surprised that more than a few of the
>other Usenet Hams become angry?

what few it s just those that are no longer being allowed to use the
NG yoto spread libel about their foes that are complaining

>Mr. Morgan, of Chassell, Michigan, has single-handedly turned the radio
>newsgroups into cesspools while myopically claiming that he is the "victum"
>and is defending his non-existent "honor".

hardly Woge r and Robeson did that over about 10 years of calling
everybody gay rapists and child molestors

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

257. Re: Vertical Whip Antennas And Gain Question ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 18:39:11 UTC
From: dplatt@radagast.org
Message-ID: <f7fpo4-pdf.ln1@radagast.org>
Source record: 37571

In article <182dnXhbBO9JdCTbnZ2dnUVZ_jydnZ2d@comcast.com>,
Robert11 <rgsros@notme.com> wrote:

>Am interested in receiving only, around the Marine VHF bands of 156 MHz, or
>so.

>I understand that "Gain" is achieved in many antenna configurations by
>making them very directional.

>My understanding is that you in effect re-shape the lobes to be prominent
>along one axis, and minimal at right angles.

That's correct. However, it's important to realize that the antenna
pattern is three-dimensional, not two-dimensional.

Antenna (directional) gain is achieved by (in effect) shaping or
compressing the lobes on both the vertical and horizontal axes.

>So, how is Gain achieved in a
>vertical whip (the specs usually mention 3 or even 6 db), or the
>rubber-duckie, types of antennas used so often on handheld scanners (or
>mounted to recreational boats) ? They are, I believe, truly omni
>directional.

They are omnidirectional in the plane which is perpendicular to the
length of the antenna. That is to say, they have the same gain or
sensitivity "on the horizon", no matter which compass direction you're
looking in.

They are *not* omnidirectional in elevation.

The gain pattern of a vertical whip looks something like a donut. The
pattern shows the greatest sensitivity in the direction of the
horizon. At angles above or below the horizon, the sensitivity
becomes less and less. A theoretically-perfect vertical antenna, in
free space, has an extremely deep "null" in the direction along its
axis... it's very insensitive to signals arriving from overhead or
below.

The way that a vertical antenna achives gain, is to compress the
"donut" pattern vertically. Compared to a standard reference dipole,
such a "gain vertical" is more sensitive in the direction of the
horizon, and for some number of degrees above and below the horizon.
Once you reach a certain elevation, the gain antenna's sensitivity drops
down to the point at which it's equal to a reference dipole... and at
higher elevation angles, it's _less_ sensitive than a reference dipole.

The word "omnidirectional" can be a bit confusing, as to a beginner this can convey the idea that the antenna radiates equal power in all directions of the sphere (and has equal receive sensitivity in all directions). That isn't the actual meaning of the term, when discussing antennas.

An antenna which does have equal sensitivy in all directions of the sphere is an "isotropic" antenna. The sensitivity / gain of an isotropic antenna is often used as a reference point for measuring or describing other antennas... if you see antenna sensitivity referred to in "dBi", you know that this is the type of reference being given.

Isotropic antennas don't (and can't) actually exist in practice... the EM field equations don't work out. It's just a convenient theoretical reference.

The other antenna gain figure you'll see is "gain, as compared to a reference half-wave dipole". This is denoted by "dBd".

For any given antenna, its gain dBi will be 2.15 dB higher than its gain in dBd (in other words, a reference half-wave dipole has a gain of 2.15 dBi or 0 dBd).

When you look at antenna descriptions or ads, make sure you know which reference is being used. Antenna manufacturers sometimes like to simply say "dB" without saying which reference... and in this case it's likely to be dBi, because it makes the gain number larger and makes the ad read better :-)

>Also, are there vertical whip antennas that are directional, with "gain"
>perhaps ?

A single vertical antenna, with no other active or parasitic element, is going to have the same pattern in every direction towards the horizon. It's rotationally symmetrical, and therefore its sensitivity pattern is also symmetrical around the vertical axis.

If you want greater sensitivity in one direction, you either need a second element, or you need to bend the antenna somehow so that it is no longer symmetrical around the vertical axis.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

258. Re: Vertical Whip Antennas And Gain Question ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 18:44:55 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1186598695.415241.154660@l70g2000hse.googlegroups.com>
Source record: 37572

On Aug 8, 9:07 am, "Robert11" <rgs...@notme.com> wrote:
> Hello,
>
> Am a real novice when it comes to antenna theory, but am trying to learn.
> if anyone could explain the following for me, even though I admit it's
> really awfully basic, would be most appreciative.
>
> Am interested in receiving only, around the Marine VHF bands of 156 MHz, or
> so.
>
> I understand that "Gain" is achieved in many antenna configurations by
> making them very directional.
> My understanding is that you in effect re-shape the lobes to be prominent
> along one axis, and minimal at right angles.
>
> So, how is Gain achieved in a
> vertical whip (the specs usually mention 3 or even 6 db), or the
> rubber-duckie, types of antennas used so often on handheld scanners (or
> mounted to recreational boats) ? They are, I believe, truly omni
> directional.
>
> Also, are there vertical whip antennas that are directional, with "gain"
> perhaps ?
>
> Thanks,
> Bob

Gain is commonly referenced to "isotropic" or pure omnidirectional
radiation. Even without using collinear elements, there's gain in a
vertical whip, just as there is in a horizontal dipole. In fact, even
an "omnidirectional" antenna operated over a ground plane has gain,
because of the reflection from the ground plane -- the surface of the
water for a marine antenna. At the very least, the energy radiated is
confined to half a sphere instead of a whole sphere.

You can download the EZNec demo program and look at, for example, a
half wave vertical dipole in freespace--just open the dipole1.ez file
(which has 2.16dB gain over isotropic), and a vertical quarter wave
fed against an infinite ground plane (which has gain over a dipole in
freespace; 3dB gain if the ground is infinitely conducting, since the
pattern is exactly half the dipole pattern, and all the power is in
that pattern, thus twice the power per unit area at a distance).
However, ground loss will kill much if not all the gain of a vertical
operated against real ground; but that may not be reported by the
antenna manufacturer, since the loss is not in the antenna itself (and

of course the numbers look better if they don't include the ground loss, inevitable though it may be). You'll see a much different effect if you simulate a vertical dipole spaced a few wavelengths above ground, be it a perfect or imperfect ground.

Vertical collinears operate by having several vertical elements radiating generally in phase, so in the horizontal plane, you the reinforcement of all of them, but as you go up or down from horizontal, the phases no longer match (it's further to an element at one end than at the other). So you get a "flat pancake" effect. You can adjust the design so the phases are not all the same, but progress uniformly along the antenna, causing a cone-shaped pattern, useful for an antenna on a high mountain, for example.

Making an antenna have purely omnidirectional radiation, even in freespace, is extremely difficult. So in that sense, pretty much all antennas have patterns which have "gain" over the theoretical omnidirectional. System losses may negate that gain, but the pattern at least will show some directionality.

Cheers,
Tom

259. Re: Vertical Whip Antennas And Gain Question ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 19:10:43 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1186600243.379779.51460@i13g2000prf.googlegroups.com>
Source record: 37573

On 8 Aug, 11:44, K7ITM <k7...@msn.com> wrote:
> On Aug 8, 9:07 am, "Robert11" <rgs...@notme.com> wrote:
>
>
>
>
>
> > Hello,
>
> > Am a real novice when it comes to antenna theory, but am trying to learn.
> > if anyone could explain the following for me, even though I admit it's
> > really awfully basic, would be most appreciative.
>
> > Am interested in receiving only, around the Marine VHF bands of 156 MHz, or
> > so.
>
> > I understand that "Gain" is achieved in many antenna configurations by
> > making them very directional.
> > My understanding is that you in effect re-shape the lobes to be prominent
> > along one axis, and minimal at right angles.
>
> > So, how is Gain achieved in a
> > vertical whip (the specs usually mention 3 or even 6 db), or the
> > rubber-duckie, types of antennas used so often on handheld scanners (or
> > mounted to recreational boats) ? They are, I believe, truly omni
> > directional.
>
> > Also, are there vertical whip antennas that are directional, with "gain"
> > perhaps ?
>
> > Thanks,
> > Bob
>
> Gain is commonly referenced to "isotropic" or pure omnidirectional
> radiation. Even without using collinear elements, there's gain in a
> vertical whip, just as there is in a horizontal dipole. In fact, even
> an "omnidirectional" antenna operated over a ground plane has gain,
> because of the reflection from the ground plane -- the surface of the
> water for a marine antenna. At the very least, the energy radiated is
> confined to half a sphere instead of a whole sphere.
>
> You can download the EZNec demo program and look at, for example, a
> half wave vertical dipole in freespace--just open the dipole1.ez file
> (which has 2.16dB gain over isotropic), and a vertical quarter wave

> fed against an infinite ground plane (which has gain over a dipole in
> freespace; 3dB gain if the ground is infinitely conducting, since the
> pattern is exactly half the dipole pattern, and all the power is in
> that pattern, thus twice the power per unit area at a distance).
> However, ground loss will kill much if not all the gain of a vertical
> operated against real ground; but that may not be reported by the
> antenna manufacturer, since the loss is not in the antenna itself (and
> of course the numbers look better if they don't include the ground
> loss, inevitable though it may be). You'll see a much different
> effect if you simulate a vertical dipole spaced a few wavelengths
> above ground, be it a perfect or imperfect ground.
>
> Vertical collinears operate by having several vertical elements
> radiating generally in phase, so in the horizontal plane, you the
> reinforcement of all of them, but as you go up or down from
> horizontal, the phases no longer match (it's further to an element at
> one end than at the other). So you get a "flat pancake" effect. You
> can adjust the design so the phases are not all the same, but progress
> uniformly along the antenna, causing a cone-shaped pattern, useful for
> an antenna on a high mountain, for example.
>
> Making an antenna have purely omnidirectional radiation, even in
> freespace, is extremely difficult. So in that sense, pretty much all
> antennas have patterns which have "gain" over the theoretical
> omnidirectional. System losses may negate that gain, but the pattern
> at least will show some directionality.
>
> Cheers,
> Tom- Hide quoted text -
>
> - Show quoted text -

Bob,
First of all we have to determine what your needs are before we talk
about antennas.
For instance, you state it is for listenning purposes only, very
important, and then you state
it is for listening to a marine band. It is here where your physical
position is important.
If you are on board a ship you might want to hear everything around,
all directions. If you are on shore then you probably
do not want to hear anything behind you and concentrate on a beam form
of antenna. The antennas for these two different situations are quite
different so this is a descision you must make before deciding on the
antenna.
Art

260. Re: Grounding systems -- need the help of some good elmers

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 19:35:35 UTC
From: "dfcoates@gmail.com" <dfcoates@gmail.com>
Message-ID: <1186601735.607820.3610@w3g2000hsg.googlegroups.com>
Source record: 37574

Thank you to everyone who replied to my initial e-mails. With a little luck, I now have the information I need to build a shack (I've got the radio, just no antenna... or any other stuff done yet for that matter).

Regards,

Dan
W4XJF

261. Re: cutting end slots in aluminum tubing

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 20:33:20 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46ba288c$0$4894$4c368faf@roadrunner.com>
Source record: 37575

"Jay in the Mojave" <jay123a@qnet.com> wrote in message
news:13be332pojn0121@corp.supernews.com...
> Ed wrote:
>> Just received my order of telescoping aluminum tubing rods from Texas
>> Towers. Sizes range from 1" OD to smaller and all 6 feet long. I
>> plan on using them as a collapsible verticle on the motor home.
>> Before I start hack-sawing away on the ends to cut slots around which
>> I will place my hose clamps, does anyone here have any particular
>> tips or techniques to do this? I figure I'd just cut two slots with
>> a hacksaw about 1" or so deep. If there's a better suggestion, I'd
>> like to hear it before wacking away on my expensive tubes.
>>
>>
>> Ed
> Hello Ed:
>
> You may find that the hand hack saw will be difficult to control and
> keep the cut straight. I use a inexpensive Band Saw, and cut the slots
> approx 1 1/2 inches long. Another consideration is the cut slot width
> maybe to narrow to fully close the outer tubing down on the inner
> tubing. So making a another saw blade width will not hurt. Use a round
> or rat tail file to deburr the inside of the tubing. Chain Saw shaping
> files work quit well for this and are cheap.
>
> You will see cheap crapp hose clamps in the home improvement stores, I
> have anyway. Find a auto parts store thats sell the Breeze brand hose
> clamps.
>
> Jay in the Mojave
>

I too vote for this mthod. Once manufactured a lot of antennas as a club
project and we made a jig that fit the band swa. Just stick the tube in the
hole and pull it out. Also tubing for the antenna was placed in a jig and
all the pieces were cutto length with one pass of a radial arm saw.

Jimmie

262. Re: Iron Powder Toroid - weatherproof?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 21:38:46 UTC
From: "news.albasani.net" <assemblywizard@gmail.com>
Message-ID: <f9dd5hmpe1@news.albasani.net>
Source record: 37576

mcclements@gmail.com wrote:
> Ok, dumb question. Can a Iron Powder Toroid be used outside without
> being weatherproofed? Can it be painted with enamel and the used that
> way? -Scott, WU2X
>

Hmmm, from the others answers, I suspect they all have only dealt with cores which have come coated with some protective coating (paint, enamel, etc.)

I took it for granted you were speaking of the ones which can be cheaply obtained, at times, which have not passed specs but are completely usable; however, the manufacturer neglected to coat them ... without coating the core shows oxidation damage with time.

Regards,
JS

263. Re: Vertical Whip Antennas And Gain Question ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 21:42:06 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <fuppo4-v1u.ln1@p400bob.personal.cox.net>
Source record: 37577

In addition to Richard's words.

One thing to also keep in mind is that once you reach the maximum range of a "lower" gain system, changing to a higher (antenna) gain system doesn't realize a huge increase in coverage. (Ignoring the gain effects of height that is)

The theory of course says that if you have 6dB more gain you will cover twice the distance, simple inverse square law stuff. What happens though is once you are at maximum distance with the lower gain system, the path losses past that point are much higher than what you get from simple inverse square law. I forget the actual numbers now but whilst still in line of sight of the antenna (and a little more) you'll get roughly the 6dB loss for every distance doubling. Past LOS and out to some distance (500km?) you lose a huge amount more, maybe 30dB per distance doubling. After 500km the loss curve is steeper still. I'll admit I cant remember the numbers nor the distances well but you can see that once past LOS, where you will be at maximum low gain coverage, an extra few dB of antenna gain wont make a lot of difference. (You can model this if it is important to know)

The best analogy I ever heard of for describing antenna gain was those foam rubber stress balls. In its spherical state it represented a point source radiator. As you squash down on the ball, it becomes more like a pattern for a normal dipole . ie the diameter in the horizontal gets larger. Higher and higher collinear gain is represented by pushing down harder on the ball still. You could eventually make it into a very thin pancake with a large diameter (and be very stress relieved!). You can also see from this analogy that in its spherical state a lot of radiation also goes up and down, where it isn't much use normally. As it flattens you get less and less up or down angle radiation. There is a downside to that for example when you are skating up and down waves, your pattern is skying one side and burying in the water in the other. It sometimes pays to not have a too high gain collinear on a boat for that reason.

Hope you find this useful.

BOB W5/VK2YQA

Richard Clark wrote:

> Quite so. Unfortunately there is more to "gain" (or effective
> sensitivity) than co-linear elements at the frequencies you are
> interested in. More important is height which can make a substantial
> difference in perceived "gain." If you invest any of your interest in

> raising an antenna, it would reward you to also hoist a co-linear
> design instead of a rubber duckie.

264. Re: Iron Powder Toroid - weatherproof?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 22:43:28 UTC
From: Chuck <no.spam@no.spam.at.all>
Message-ID: <1186612872_221@sp12lax.superfeed.net>
Source record: 37578

news.albasani.net wrote:
> mcclements@gmail.com wrote:
>> Ok, dumb question. Can a Iron Powder Toroid be used outside without
>> being weatherproofed? Can it be painted with enamel and the used that
>> way? -Scott, WU2X
>>
>
> Hmmm, from the others answers, I suspect they all have only dealt with
> cores which have come coated with some protective coating (paint,
> enamel, etc.)
>
> I took it for granted you were speaking of the ones which can be cheaply
> obtained, at times, which have not passed specs but are completely
> usable; however, the manufacturer neglected to coat them ... without
> coating the core shows oxidation damage with time.
>
> Regards,
> JS

Out of curiosity, I immersed a 37 uH
inductor wound on an FT37-43 core in tap
water. Using a (1 kHz) inductance meter,
I saw no change in inductance.
Unfortunately my bench has been co-opted
by other projects and a measurement of Q
at RF is in its own queue.

Also, from the Micrometals website:

"Micrometals recommends that all
uncoated cores should be sheltered from
high humidity or rain since they will
eventually form surface rust."

73,

Chuck

-----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

265. Re: Iron Powder Toroid - weatherproof?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-08 23:46:47 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <46bb2abb$1@news.cuneo2lemon.net>
Source record: 37579

Chuck wrote:

> ...
> Out of curiosity, I immersed a 37 uH inductor wound on an FT37-43 core
> in tap water. Using a (1 kHz) inductance meter, I saw no change in
> inductance. Unfortunately my bench has been co-opted by other projects
> and a measurement of Q at RF is in its own queue.
>
> Also, from the Micrometals website:
>
> "Micrometals recommends that all uncoated cores should be sheltered from
> high humidity or rain since they will eventually form surface rust."
> ...
> Chuck
> ...

Chuck:

Yes, that is what mainly worries me, oxidizing of the iron core (or, rust.) I am not even sure how the rust would degrade the cores performance; since, the sheer mental picture of the physical look of a corroded balun is enough to make me attempt to escape this condition. I have "revived" old oxidized cores with tripoli and a buffing wheel, then a protective coating.

I always attempt to waterproof any balun I make. Sometimes this takes form as an old plastic container with holes in the bottom for any water which leaks in to escape, but keeps the rain off ...

Regards,
JS

266. Re: Jumpers across tower sections

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 01:18:56 UTC
From: W2RAC <w2racNOSPAM@cfl.rr.com>
Message-ID: <0qqkb35p7hdd86tals6n84cirehgmjh91l@4ax.com>
Source record: 37580

LOTS of NEVERSEZE (bad spelling I know) will also IMHO help with
grouding and taking down the tower years later.

On Wed, 08 Aug 2007 06:35:21 -0500, Nate Bargmann
<n0nb.DO.NOT.SPAM@ME.networksplus.net> wrote:

>On Mon, 06 Aug 2007 14:00:08 -0400, Rick (W-A-one-R-K-T) wrote:
>
>> For lightning protection, is it generally considered good practice to
>> install heavy-gauge copper wire jumpers across each junction point
>> between tower sections?
>
>My reading of the Polyphaser technical papers is that bonding between
>sections is not done for many of the reasons already mentioned.
>
>> My guess is that the electrical connection between one tower section and
>> the next might be somewhat variable, especially if the tower sections
>> weren't new when the tower was assembled.
>
>So long as the galvanized metal surfaces are clean when assembled, there
>should be adequate bonding between the two.
>
>73, de Nate >>

267. Re: Iron Powder Toroid - weatherproof?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 09:21:11 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <i-ednf12ZbQUQSfbnZ2dnUVZ8vmdnZ2d@pipex.net>
Source record: 37581

mcclements@gmail.com wrote:
> Ok, dumb question. Can a Iron Powder Toroid be used outside without
> being weatherproofed? Can it be painted with enamel and the used that
==========
iron powder ---> rust ------> protect -------> self-amalgamating tape.

Frank GM0CSZ / KN6WH

268. Re: Iron Powder Toroid - weatherproof?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 09:29:22 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <-uOdnfcPb9nuQyfb4p2dnAA@pipex.net>
Source record: 37482

mcclements@gmail.com wrote:
> Ok, dumb question. Can a Iron Powder Toroid be used outside without
> being weatherproofed? Can it be painted with enamel and the used that
==========
iron powder ---> rust ------> protect -------> self-amalgamating tape.

Frank GM0CSZ / KN6WH

269. measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 12:13:45 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46bb04f9$0$4729$4c368faf@roadrunner.com>
Source record: 37483

I need to measure the loss of aproximately 200ft of coax @ a freq of 1Ghz. The normal procedure for doing this is to inject a signal at one end and measure the power out at the other. Using available test eqipment this is a real pain to do. I propose to disconnect the cable at the top of the tower terminating it in either a short or open and measure the return loss at the source end. I have done this and measured 6.75 db and I am assuming that 1/2 of this would be the actual loss of the cable. These numbers do fall within the established norms for this cable. Can you think of a reason thiis method would not be valid?

Jimmie

270. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 13:03:32 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <EgEui.4923$MT3.3995@trnddc05>
Source record: 37484

"Jimmie D" <GFENDER@carolina.rr.com> wrote in message
news:46bb04f9$0$4729$4c368faf@roadrunner.com...
>I need to measure the loss of aproximately 200ft of coax @ a freq of 1Ghz.
>The normal procedure for doing this is to inject a signal at one end and
>measure the power out at the other. Using available test eqipment this is a
>real pain to do. I propose to disconnect the cable at the top of the tower
>terminating it in either a short or open and measure the return loss at the
>source end. I have done this and measured 6.75 db and I am assuming that
>1/2 of this would be the actual loss of the cable. These numbers do fall
>within the established norms for this cable. Can you think of a reason
>thiis method would not be valid?
>
>
> Jimmie

Hi Jimmie

I consider "return loss" to be a ratio related to the mismatch of the load
to the line. A short on the end of a low loss line will have high Return
Loss. You probably did some math that isnt apparent in the statement "I am
assuming that 1/2 (of 6.75 dB) is the actual loss". .

How difficult would it be to take a length of some decent RG-6 up the
tower to send the signal down to the *lower end*?

Jerry

271. "Extension" antenna ?in?sanity check, please?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 13:50:46 UTC
From: Don Bruder <dakidd@sonic.net>
Message-ID: <46bb1bb6$0$14101$742ec2ed@news.sonic.net>
Source record: 37485

Greetings, folks...
Not EXACTLY ham-related, but since there's about a metric buttload of smarts on radio topics here, figured I might get some useful input.

The situation:
Guess-timated 800 feet of co-ax "abandoned in place" between house and outbuilding. Once supplied CATV signal to apartment in the outbuilding, now connected to nothing at either end. I can't find any definitive markings on the exposed sections to tell me precisely what "flavor" it is, but I'd suspect it's "just plain old Cable TV wire" - RG-58?

The goal:
Run a computer with an 802.11 card (2.417-2.467 GHz) in the outbuilding's apartment, and have the wireless connect to the router in the house. Not possible at the moment due to lack of signal. ("No access point in range" diagnostic from the card's 'ware.)

Secondary goal:
Spend little or no $$$ in the doing.

The restrictions:
The owner of the router in the house forbids ANY modification of the router - no screwing one of those fancy 802.11 range extender antennas onto the beast, etc., but if I can do it using other methods, I'm welcome to.

The thought:
Attach a properly tuned antenna to each end of the co-ax, position the one at the house end as near the router as possible, and park the machine in the apartment near the other end. I'm thinking a sort of "radio pipeline" here.

The workability:
That's where you guys come in! Does this plan fall into the "utterly hopeless - you're nuts!" category, or is it a "Might work, if you sacrifice a goat over the contraption during the dark of the moon whilst chanting to the wireless gods" concept? Or better yet, is it a case of "It should work just fine!"?

Any thoughts/suggestions welcome...

Thanks in advance!

--
Don Bruder - dakidd@sonic.net - If your "From:" address isn't on my whitelist, or the subject of the message doesn't contain the exact text "PopperAndShadow" somewhere, any message sent to this address will go in the garbage without my

ever knowing it arrived. Sorry... <http://www.sonic.net/~dakidd> for more info

272. Re: "Extension" antenna ?in?sanity check, please?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 15:22:39 UTC
From: ricknj10@hotmail.com
Message-ID: <46bb3099.9242828@news.optonline.net>
Source record: 37486

Since you have so much signal at the router, you might get away with it, even though there will be a lot of loss in the coax. Incidentally it is probably RG-59.
Technically, it will work (the antennas and coax will transfer the signals between the two locations).
I'd say you have a good chance at success.

Rick K2XT

273. Building a T2FD antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 16:55:33 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.09.16.55.31.206413@from.qrz.com>
Source record: 37487

I've pretty much decided to go ahead and build a T2FD "radiating dummy load", hopefully for use from 2 to 24 MHz.

This will be almost (but not quite) exclusively for receiving, wherein my limiting factor is usually noise anyway, rather than antenna efficiency. If somebody appears on one of the frequencies I scan that I want to talk to, if he's not S9 or better I'll likely switch over to a "real" antenna. But, the occasional use for transmitting means I'll need the appropriate power resistor on the load end (100 watts or so).

You guys have suggested googling for "T2FD" and "TTFD" and I have done that, but I haven't yet found anything that really lays out how to design and build one of these things, what the formulas are, etc.

Some of the Google hits suggest using baluns and resistor values all the way from 11:1 balun, 550 ohm resistor, and 50-ohm coax to 4:1 balun, 300-ohm resistor, and 75-ohm coax. Some seem to imply that one should use a resistor value equal to the coax impedance times the balun ratio, and others say that the resistor value should be some percent higher than the coax impedance times the balun ratio (one site suggested 75 ohm coax, 4:1 balun, and 390-ohm resistor).

Obviously I'd like to do this a cheaply as possible and I do have a W2AU 4:1 balun sitting on the shelf here, so would 50 or 75 ohm coax, 4:1 balun, and anywhere from 300 to 390 ohms for the terminating resistor work as well as a higher resistance value and a higher ratio, scarce, and more expensive balun?

I have seen formulas, which I can no longer find, that say what the length should be for a given minimum frequency, and what the spacing between the conductors should be. I assume that the spacing of the conductors has a lot to do with the balun ratio and terminating resistor.

I guess if I can find the length, conductor spacing, and terminating resistor value needed for 2 MHz minimum and 4:1 W2AU balun I should be all set.

Thanks...

274. Re: Building a T2FD antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 17:03:23 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <vNHui.13433$eY.7579@newssvr13.news.prodigy.net>
Source record: 37488

Rick (W-A-one-R-K-T) wrote:
> I've pretty much decided to go ahead and build a T2FD "radiating dummy
> load", hopefully for use from 2 to 24 MHz.
>
> This will be almost (but not quite) exclusively for receiving, wherein my
> limiting factor is usually noise anyway, rather than antenna efficiency.
> If somebody appears on one of the frequencies I scan that I want to talk
> to, if he's not S9 or better I'll likely switch over to a "real" antenna.
> But, the occasional use for transmitting means I'll need the appropriate
> power resistor on the load end (100 watts or so).
>
> You guys have suggested googling for "T2FD" and "TTFD" and I have done
> that, but I haven't yet found anything that really lays out how to design
> and build one of these things, what the formulas are, etc.
>
> Some of the Google hits suggest using baluns and resistor values all the
> way from 11:1 balun, 550 ohm resistor, and 50-ohm coax to 4:1 balun,
> 300-ohm resistor, and 75-ohm coax. Some seem to imply that one should use
> a resistor value equal to the coax impedance times the balun ratio, and
> others say that the resistor value should be some percent higher than the
> coax impedance times the balun ratio (one site suggested 75 ohm coax, 4:1
> balun, and 390-ohm resistor).
>
> Obviously I'd like to do this a cheaply as possible and I do have a W2AU
> 4:1 balun sitting on the shelf here, so would 50 or 75 ohm coax, 4:1
> balun, and anywhere from 300 to 390 ohms for the terminating resistor work
> as well as a higher resistance value and a higher ratio, scarce, and more
> expensive balun?
>
> I have seen formulas, which I can no longer find, that say what the length
> should be for a given minimum frequency, and what the spacing between the
> conductors should be. I assume that the spacing of the conductors has a
> lot to do with the balun ratio and terminating resistor.
>
> I guess if I can find the length, conductor spacing, and terminating
> resistor value needed for 2 MHz minimum and 4:1 W2AU balun I should be all
> set.
>
> Thanks...
>

The terminating resistor of a B&W antenna is 600 ohms resistive i.e.
there is a 600 ohm resistor connected to the ends of the folded dipole
antenna. It's purpose is to swamp the current leftover when the standing

wave is formed. The balun is of necessity a 12 to 1 ratio balun. Other values may be used to other effects.
The biggest problem is the balun. I haven't seen any specs for making one. The resistors need to be carbon non inductive high wattage.

Let us know how you do.

Dave WD9BDZ

275. Re: "Extension" antenna ?in?sanity check, please?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 17:12:10 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns998767FBE16B9spectrumhogstarbandn@198.186.192.196>
Source record: 37489

No way you are going to get any significant amount of the Router's 40 or 50 mW of 2.4GHz signal out the other end of 800 feet of that cable, be it RG59 or RG6.

Three options come to my mind at the moment. 1) try a high gain (directional) WiFi antenna at the outbuilding end only to try and get a signal. MFJ makes a tiny yagi for that purpose. 2) possibly obtain another WiFi Router or bridge of your own and connect it by ethernet cable to a port on the owner's router, thus having your own wifi router to play with by adding directional antennas, etc. 3) install a wifi bridge unit somewhere in between the two locations...

I believe there are possibly other ways, too, but I haven't had my morning coffee yet, so that's all I can come up with at the moment.

Ed

276. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 17:19:05 UTC
From: Frank's <frank599@nojunkmailplease.telus.net>
Message-ID: <d0lui.69662$lo4.66446@edtnps89>
Source record: 37490

"Jimmie D" <GFENDER@carolina.rr.com> wrote in message
news:46bb04f9$0$4729$4c368faf@roadrunner.com...
>I need to measure the loss of aproximately 200ft of coax @ a freq of 1Ghz.
>The normal procedure for doing this is to inject a signal at one end and
>measure the power out at the other. Using available test eqipment this is a
>real pain to do. I propose to disconnect the cable at the top of the tower
>terminating it in either a short or open and measure the return loss at the
>source end. I have done this and measured 6.75 db and I am assuming that
>1/2 of this would be the actual loss of the cable. These numbers do fall
>within the established norms for this cable. Can you think of a reason
>thiis method would not be valid?
>
>
> Jimmie

Half the return loss is a valid method of determining the transmission line
loss.

Frank

277. Re: Building a T2FD antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 17:39:06 UTC
From: gsm@mendelson.com
Message-ID: <slrnfbmk1o.ljf.gsm@cable.mendelson.com>
Source record: 37491

Rick (W-A-one-R-K-T) wrote:
> You guys have suggested googling for "T2FD" and "TTFD" and I have done
> that, but I haven't yet found anything that really lays out how to design
> and build one of these things, what the formulas are, etc.

Actually I suggested you look at Heys book, or the second edition.
The original one had several pages complete with measurments, how
to build resistors from cheap low power ones and so on.

> Obviously I'd like to do this a cheaply as possible and I do have a W2AU
> 4:1 balun sitting on the shelf here, so would 50 or 75 ohm coax, 4:1
> balun, and anywhere from 300 to 390 ohms for the terminating resistor work
> as well as a higher resistance value and a higher ratio, scarce, and more
> expensive balun?

You can wind a 9:1 balun pretty easily, I found that for HF, you could
make one from torroids found in PC power supplies. I tested the ones
I made with a dummy load and ran some power into them. If they got
hot, I did not use them. :-)

However Heys does not suggest you use a 9:1 balun, he suggests a 4:1.

> I have seen formulas, which I can no longer find, that say what the length
> should be for a given minimum frequency, and what the spacing between the
> conductors should be. I assume that the spacing of the conductors has a
> lot to do with the balun ratio and terminating resistor.

While they are not extremely critical, they need to be pretty close.
If you change the geometry of the antenna, you change how it acts.
Too narrow and it becomes a folded dipole with a center load and
too wide it becomes a rhombic or rectangular loop.

Note that the antenna needs to be mounted at specific angle with a
a specific height from the ground. Changing them changes the way the
antenna works.

Captain G. L. Countryman, USN(W3HH*), who developed it, placed it over
conductive ground (the sea shore), but it seems to work well over
regular ground too.

> I guess if I can find the length, conductor spacing, and terminating
> resistor value needed for 2 MHz minimum and 4:1 W2AU balun I should be all
> set.

That would be an awfully big antenna. However, I think you could
cut one for 3.5mHz and it would still work at 2. They do work
well at lower frequencies than they are cut.

From Heys' book:

For 1.8 mHz top length 182' 2" spacing between top and bottom 5' 5"".
For 3.6 mHz top length 91' 1" spacing 2'8"

He lists the height as being 35' above ground sloping to 5 feet for a 7mHz antenna and says it would be proportional, so a 3.5 mHz antenna would need to be 70' up. The angle of the antenna is 30 degrees, from the mast to the center of the spacer.

You probably could get away with a 7mHz version, (half of a 3.5 version).

Note that he also suggests using 75 Ohm coax,a 4:1 balun and a resistor made of four rows of six 270 ohm 2w resistors for a 100 watt CW or 300 watt SSB transmitter.

I suggest that before you go any further you get a copy of the book.

Geoff.

* He was W3HH, his call has since been reassigned.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

278. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 17:52:11 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1186681931.378887.76820@k79g2000hse.googlegroups.com>
Source record: 37492

On Aug 9, 5:13 am, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
> I need to measure the loss of aproximately 200ft of coax @ a freq of 1Ghz.
> The normal procedure for doing this is to inject a signal at one end and
> measure the power out at the other. Using available test eqipment this is a
> real pain to do. I propose to disconnect the cable at the top of the tower
> terminating it in either a short or open and measure the return loss at the
> source end. I have done this and measured 6.75 db and I am assuming that 1/2
> of this would be the actual loss of the cable. These numbers do fall within
> the established norms for this cable. Can you think of a reason thiis method
> would not be valid?
>
> Jimmie

It will be valid if the Z0 of the line is uniform, and matches the calibration of the instrument you use to measure it. If the Z0 is uniform but different than the impedance to which the instrument is calibrated, you can easily see that effect by measuring the return loss with the far end open and with it shorted. You can get the same info, again assuming a uniform line, and assuming essentially unchanged attenuation over a 2.5MHz span around your measurement frequency, by measuring at multiple frequencies (doing a sweep). If the line is the same impedance the instrument is calibrated to, the return loss will trace out a circle centered on the middle of a Smith display (assuming that display is referenced to the instrument's impedance); in any event, the circle will be centered on the line's Z0. If the line Z0 is non-uniform, expect the attenuation to vary with frequency; the Smith display of a sweep likely will be quite non-circular.

Cheers,
Tom

279. Re: "Extension" antenna ?in?sanity check, please?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 18:14:07 UTC
From: dplatt@radagast.org
Message-ID: <f42so4-as9.ln1@radagast.org>
Source record: 37493

In article <46bb3099.9242828@news.optonline.net>,
Rick <ricknj10@hotmail.com> wrote:

>Since you have so much signal at the router, you might get away with it, even
>though there will be a lot of loss in the coax. Incidentally it is probably
>RG-59.

One on-line coax-loss calculator indicates about 144 dB of loss in
RG-59, at 2.4 GHz over an 800-foot span.

Added to the antenna losses at both ends, and I have real doubts as to
whether a usable signal will result. It *might* work if the 802.11
radios were plugged directly into the coax, with no antennas involved,
but that does not sound feasible.

>I'd say you have a good chance at success.

I have serious doubts.

I'd suggest another approach - use the coax to carry wired Ethernet
(perhaps with a simple 1.5:1 unun at each end). Losses will be far
lower at 10 MHz than they are at 2400 MHz. 10Base2 (over RG-58) is
spec'ed for up to 600 feet per segment, and 10Base5 (over RG-8) will
go more than 1500 feet.

It'd be necessary to install a 10BaseT-to-10Base2 bridge next to the
router, and some other sort of 10Base2 termination at the outbuilding
(another bridge / router / access-point).

Although most consumer-grade Ethernet products on the market these
days are 10BaseT- or 100BaseT-only, it's possible to find older
Ethernet hubs and switches with 10Base2 BNC jacks fairly easily on the
surplus market.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

280. Re: Building a T2FD antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 18:39:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <pvmmb3p2fhqa9lcpl847mqkm9po99vmtrt@4ax.com>
Source record: 37494

On Thu, 09 Aug 2007 12:55:33 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>
>I've pretty much decided to go ahead and build a T2FD "radiating dummy
>load", hopefully for use from 2 to 24 MHz.

Hi Rick,

I've seen discussion about cutting the length of this air-cooled
resistor (what do you mean almost exclusively receive? Use a 1/4 watt
resistor then!). A halfwave design at 2 MHz is going to be 6
wavelengths long at 24 MHz. The resistor/BalUn may match well, but
the resulting lobes may not point where you expect them to.

Very small antennas (let's say halfwave for 20M) will receive 2 MHz
quite nicely (or as well as the resistor will allow); and point in the
direction (broadside) you expect for any of these frequencies.

>If somebody appears on one of the frequencies I scan that I want to talk
>to, if he's not S9 or better I'll likely switch over to a "real" antenna.

You don't seem very committed to any particular "general" solution; so
what is your real goal?

73's
Richard Clark, KB7QHC

281. Re: Building a T2FD antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 18:52:12 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.09.18.52.10.933156@from.qrz.com>
Source record: 37495

On Thu, 09 Aug 2007 11:39:55 -0700, Richard Clark wrote:

> I've seen discussion about cutting the length of this air-cooled
> resistor (what do you mean almost exclusively receive? Use a 1/4 watt
> resistor then!).

Because the one time I need to transmit on it, I'll blow the resistor.

> You don't seem very committed to any particular "general" solution; so
> what is your real goal?

I'm active in CAP and MARS on frequencies from 2 to 24 MHz. I need to be able to program all of the frequencies of interest into my FT-1000 and put it on scan, then if someone I need to talk to shows up (and is strong) on one of the channels in my scan, I can just pick up the mike and call him.

I have two inverted vees fed with ladder line and tuners that I normally use, but they're not suitable for scanning because one of the tuners is manual and the other one can't keep up with scanning different channels even if I had a computer interface for it so I could tell it what frequency I'm listening on.

I could just throw out a random length wire, without a tuner, and use that for receiving but I wouldn't be able to transmit on it when someone I need to talk to shows up on one of the channels.

Hence, right now at least, the T2FD looks like the only viable short-term solution for the scanner... a longer term solution will be an array of cut dipoles whose fundamental or odd harmonic is near one of the frequencies of interest, but that's going to be a while coming.

282. Re: Building a T2FD antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 18:53:40 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <5fomb31a9l07med09oditol6uo305n8hci@4ax.com>
Source record: 37496

On Thu, 09 Aug 2007 12:55:33 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>
>I've pretty much decided to go ahead and build a T2FD "radiating dummy
>load", hopefully for use from 2 to 24 MHz.
>
>This will be almost (but not quite) exclusively for receiving, wherein my
>limiting factor is usually noise anyway, rather than antenna efficiency.
>If somebody appears on one of the frequencies I scan that I want to talk
>to, if he's not S9 or better I'll likely switch over to a "real" antenna.
>But, the occasional use for transmitting means I'll need the appropriate
>power resistor on the load end (100 watts or so).
>
>You guys have suggested googling for "T2FD" and "TTFD" and I have done
>that, but I haven't yet found anything that really lays out how to design
>and build one of these things, what the formulas are, etc.

Did you see the Cebik page? http://www.cebik.com/radio.html He lays
out dimensions & resistor values for two t2fd's in your frequency
range.

bob
k5qwg

>
>Some of the Google hits suggest using baluns and resistor values all the
>way from 11:1 balun, 550 ohm resistor, and 50-ohm coax to 4:1 balun,
>300-ohm resistor, and 75-ohm coax. Some seem to imply that one should use
>a resistor value equal to the coax impedance times the balun ratio, and
>others say that the resistor value should be some percent higher than the
>coax impedance times the balun ratio (one site suggested 75 ohm coax, 4:1
>balun, and 390-ohm resistor).
>
>Obviously I'd like to do this a cheaply as possible and I do have a W2AU
>4:1 balun sitting on the shelf here, so would 50 or 75 ohm coax, 4:1
>balun, and anywhere from 300 to 390 ohms for the terminating resistor work
>as well as a higher resistance value and a higher ratio, scarce, and more
>expensive balun?
>
>I have seen formulas, which I can no longer find, that say what the length
>should be for a given minimum frequency, and what the spacing between the
>conductors should be. I assume that the spacing of the conductors has a
>lot to do with the balun ratio and terminating resistor.
>

>I guess if I can find the length, conductor spacing, and terminating
>resistor value needed for 2 MHz minimum and 4:1 W2AU balun I should be all
>set.
>
>Thanks...

283. Re: Building a T2FD antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 19:03:49 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <ZdGdnSu0pP6K-CbbRVnyjgA@pipex.net>
Source record: 37497

> The terminating resistor of a B&W antenna is 600 ohms resistive i.e.
> there is a 600 ohm resistor connected to the ends of the folded dipole
> antenna. It's purpose is to swamp the current leftover when the standing
> wave is formed. The balun is of necessity a 12 to 1 ratio balun. Other
> values may be used to other effects.
> The biggest problem is the balun. I haven't seen any specs for making
> one. The resistors need to be carbon non inductive high wattage.
==========
A 12:1 ratio balun is decribed by Jerry Sevick , W2FMI in his book :
"Building and using Baluns and Ununs" , pages 54-55
It is in fact a combination of a 1:1.33 Unun and a 1:9 (type Guanella)
Balun , hence for an impedence transformation of 50 Ohms unbalanced to
600 ohms balanced. The unit has 4 toroids.

The above book : Library of Congress Catalogue Card Number 94-69520
ISBN 0-943016-09-6

Frank GM0CSZ / KN6WH

284. Re: dlody the frreak

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 19:24:41 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <cJqdnegT6_tD9CbbnZ2dnUVZ_veinZ2d@comcast.com>
Source record: 37498
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy

```
<Mark@TayleorRobesin.org> wrote in message
news:6e2kb3de55dmdpv38032d3m12o4f16o8d2@4ax.com...
> On Wed, 8 Aug 2007 07:54:55 -0400, "Ralph" <anon@anon> wrote:
>
>>
>><Mark@TayleorRobesin.org> wrote in message
>>news:tigib3991ktqf8g8lnnvj0rmfenhonrglo@4ax.com...
>>> On Tue, 07 Aug 2007 23:38:29 -0400, KU2S <ku2s@arast.org> wrote:
>>>
>>>> As I read these posts, I wonder just how old you people really
>>>>are. I haven't seen such name-calling and chest-thumping since I
>>>>graduated from High School back in the 70's. I've been monitoring
>>>>this newsgroup for a couple of years now, and all I can recall seeing
>>>>is one post after another comprising of nothing more than personal
>>>>attacks and filthy language. It's not just here, but also in several
>>>>other Ham and CB related newsgroups. Damn, people.. the purpose of
>>>>Amateur radio and CB radio is to communicate. All you folks seem
>>>>interested in doing is instigating...
>>>
>>
>>The principle miscreant amongst the few "actors" is Mark Morgan, KB9RQZ,
>>himself. When flooding the Amateur radio groups with hundreds of daily
>>nonsense posts, can you be at all surprised that more than a few of the
>>other Usenet Hams become angry?
>
> what few it s just those that are no longer being allowed to use the
> NG yoto spread libel about their foes that are complaining
>
>>Mr. Morgan, of Chassell, Michigan, has single-handedly turned the radio
>>newsgroups into cesspools while myopically claiming that he is the
>>"victum"
>>and is defending his non-existent "honor".
>
> hardly Woge r and Robeson did that over about 10 years of calling
> everybody gay rapists and child molestors
>
> "one useless man is disgrace 2 become a law firm 3 or more become a
> congress"
> adams
>
> woger you are a Congress all in your own head
>
> http://kb9rqz.bravejournal.com/
```

>
> G
>
> --
> Posted via a free Usenet account from http://www.teranews.com
>
Hey Jerk-Off,

The only thing that you are doing is antagonizing the group with your constant HARANGUING OF Xposting SPAM of the same VERBIAGE garbage. Why don't you BABIES take this to direct emails between yourselves and leave the groups that are not SEXUALLY ORIENTED in peace? Nobody is really interested in your FILTHY LANGUAGE crap anymore!

285. Re: dlody the frreak

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 19:34:37 UTC
From: Mark@TayleorRobesin.org
Message-ID: <buqmb359b81mc8stb7kgan81kkjmdf1inc@4ax.com>
Source record: 37499
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.policy

```
On Thu, 9 Aug 2007 15:24:41 -0400, "John Doe" <hgorden@adelphia.net>
wrote:

>
><Mark@TayleorRobesin.org> wrote in message
>news:6e2kb3de55dmdpv38032d3m12o4f16o8d2@4ax.com...
>> On Wed, 8 Aug 2007 07:54:55 -0400, "Ralph" <anon@anon> wrote:
>>
>>>
>>>><Mark@TayleorRobesin.org> wrote in message
>>>news:tigib3991ktqf8g8lnnvj0rmfenhonrglo@4ax.com...
>>>> On Tue, 07 Aug 2007 23:38:29 -0400, KU2S <ku2s@arast.org> wrote:
>>>>
>>>>> As I read these posts, I wonder just how old you people really
>>>>>are. I haven't seen such name-calling and chest-thumping since I
>>>>>graduated from High School back in the 70's. I've been monitoring
>>>>>this newsgroup for a couple of years now, and all I can recall seeing
>>>>>is one post after another comprising of nothing more than personal
>>>>>attacks and filthy language. It's not just here, but also in several
>>>>>other Ham and CB related newsgroups. Damn, people.. the purpose of
>>>>>Amateur radio and CB radio is to communicate. All you folks seem
>>>>>interested in doing is instigating...
>>>>
>>>
>>>The principle miscreant amongst the few "actors" is Mark Morgan, KB9RQZ,
>>>himself. When flooding the Amateur radio groups with hundreds of daily
>>>nonsense posts, can you be at all surprised that more than a few of the
>>>other Usenet Hams become angry?
>>
>> what few it s just those that are no longer being allowed to use the
>> NG yoto spread libel about their foes that are complaining
>>
>>>Mr. Morgan, of Chassell, Michigan, has single-handedly turned the radio
>>>newsgroups into cesspools while myopically claiming that he is the
>>>"victum"
>>>and is defending his non-existent "honor".
>>
>> hardly Woge r and Robeson did that over about 10 years of calling
>> everybody gay rapists and child molestors
>>
>> "one useless man is disgrace 2 become a law firm 3 or more become a
>> congress"
>> adams
```

>>
>> woger you are a Congress all in your own head
>>
>> http://kb9rqz.bravejournal.com/
>>
>> G
>>
>> --
>> Posted via a free Usenet account from http://www.teranews.com
>>
>Hey Jerk-Off,

most people call that a sexaul remark
>
>The only thing that you are doing is antagonizing the group with your
>constant HARANGUING OF Xposting SPAM of the same VERBIAGE garbage.

can't tell your socks from y posting sorry

> Why
>don't you BABIES take this to direct emails between yourselves and leave the
>groups that are not SEXUALLY ORIENTED in peace?

why would I want to exachange email with these creeps and stalkers?

> Nobody is really interested
>in your FILTHY LANGUAGE crap anymore!

but you were and rewarded it for years so the crapmongers will surely
continue till till you stop rewarding them

>

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

286. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 19:40:53 UTC
From: Chuck <no.spam@no.spam.at.all>
Message-ID: <1186688326_751@sp12lax.superfeed.net>
Source record: 37500

K7ITM wrote:

>
> It will be valid if the Z0 of the line is uniform, and matches the
> calibration of the instrument you use to measure it.

SNIP

It may be worth adding that even when
the line is neither uniform nor matched
to the impedance of the RLB, the
measured return loss will correctly
indicate the sum of losses due to the
mismatch and to the line losses.

When the line impedance is uniform, the
mismatch loss can be simply calculated
and the cable loss can then be found.

73,

Chuck

-----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

287. Re: "Extension" antenna ?in?sanity check, please?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 19:41:23 UTC
From: robert casey <wa2ise@ix.netcom.com>
Message-ID: <D5Kui.15144$zA4.14438@newsread3.news.pas.earthlink.net>
Source record: 37501

>
> One on-line coax-loss calculator indicates about 144 dB of loss in
> RG-59, at 2.4 GHz over an 800-foot span.
>
> Added to the antenna losses at both ends, and I have real doubts as to
> whether a usable signal will result. It *might* work if the 802.11
> radios were plugged directly into the coax, with no antennas involved,
> but that does not sound feasible.
>

If you get a pair of preamp/power amp modules, like these:
<http://cgi.ebay.com/2-4GHz-802-11b-1-Watt-WiFi-amplifier-signal-booster_W0QQitemZ58456080
31QQcmdZViewItem?hash=item5845608031&_trksid=p3286.c50.m20.l1116>
and use them at both ends of that long run of coax, it might work. But
at $186 times 2, that's rather expensive for something that's not
guaranteed. At least, with the amps feeding directly into the coax, you
probably would have a minimum of interference from other wifi users and
microwave ovens.

288. Re: "Extension" antenna ?in?sanity check, please?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 20:25:56 UTC
From: dplatt@radagast.org
Message-ID: <kr9so4-v0q.ln1@radagast.org>
Source record: 37502

In article <D5Kui.15144$zA4.14438@newsread3.news.pas.earthlink.net>,
robert casey <wa2ise@ix.netcom.com> wrote:
>> One on-line coax-loss calculator indicates about 144 dB of loss in
>> RG-59, at 2.4 GHz over an 800-foot span.
>>
>> Added to the antenna losses at both ends, and I have real doubts as to
>> whether a usable signal will result. It *might* work if the 802.11
>> radios were plugged directly into the coax, with no antennas involved,
>> but that does not sound feasible.
>>
>
>If you get a pair of preamp/power amp modules, like these:
><http://cgi.ebay.com/2-4GHz-802-11b-1-Watt-WiFi-amplifier-signal-booster_W0QQitemZ5845608
031QQcmdZViewItem?hash=item5845608031&_trksid=p3286.c50.m20.l1116>
>and use them at both ends of that long run of coax, it might work.

Even that might be marginal.

One site I Googled stated a WiFi receiver sensitivity of -76 dBm. A
typical WiFi card has a transmitter output of around 15 dBm, and
access points may be up in the 20 dBm range. That'll allow for only
about 100 dB of attenuation between transmitter and receiver before
you can't get a good connection any more... and the estimate for the
RG-59 coax was 45 dB worse than that.

Boosting the power to 1 watt will give you between 10 and 15 dB of
additional signal... still far short of the 45 dB of additional power
and/or sensitivity needed for a connection.

Running 2.4 GHz over thin cable is just sorta silly... especially when
there's a decades-old, well-tested, and very reliable cable-based
technology which will give equal or better data rates due to much
lower attenuation at lower frequencies.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

289. Re: Jumpers across tower sections

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 22:42:54 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46bb9869$0$3176$4c368faf@roadrunner.com>
Source record: 37503

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in message
news:pan.2007.08.06.18.00.06.782238@from.qrz.com...
>
> For lightning protection, is it generally considered good practice to
> install heavy-gauge copper wire jumpers across each junction point between
> tower sections?
>
> My guess is that the electrical connection between one tower section and
> the next might be somewhat variable, especially if the tower sections
> weren't new when the tower was assembled.
>

If you are really serious about grounding the tower you can run copper
braided ground wire from an air terminal on top of the tower to a ground
system below but this is not normally done on amateur towers.

Jimmie

290. Re: Building a T2FD antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 23:13:28 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9g72p$3bk$1@nntp1.jpl.nasa.gov>
Source record: 37504

David G. Nagel wrote:
> Rick (W-A-one-R-K-T) wrote:
>
>> I've pretty much decided to go ahead and build a T2FD "radiating dummy
>> load", hopefully for use from 2 to 24 MHz.
>>
>> This will be almost (but not quite) exclusively for receiving, wherein my
>> limiting factor is usually noise anyway, rather than antenna
>> efficiency. If somebody appears on one of the frequencies I scan that
>> I want to talk
>> to, if he's not S9 or better I'll likely switch over to a "real"
>> antenna. But, the occasional use for transmitting means I'll need the
>> appropriate
>> power resistor on the load end (100 watts or so).
>>
>> You guys have suggested googling for "T2FD" and "TTFD" and I have done
>> that, but I haven't yet found anything that really lays out how to design
>> and build one of these things, what the formulas are, etc.
>>
>> Some of the Google hits suggest using baluns and resistor values all the
>> way from 11:1 balun, 550 ohm resistor, and 50-ohm coax to 4:1 balun,
>> 300-ohm resistor, and 75-ohm coax. Some seem to imply that one should
>> use
>> a resistor value equal to the coax impedance times the balun ratio, and
>> others say that the resistor value should be some percent higher than the
>> coax impedance times the balun ratio (one site suggested 75 ohm coax, 4:1
>> balun, and 390-ohm resistor).
>>
>> Obviously I'd like to do this a cheaply as possible and I do have a W2AU
>> 4:1 balun sitting on the shelf here, so would 50 or 75 ohm coax, 4:1
>> balun, and anywhere from 300 to 390 ohms for the terminating resistor
>> work
>> as well as a higher resistance value and a higher ratio, scarce, and more
>> expensive balun?
>>
>> I have seen formulas, which I can no longer find, that say what the
>> length
>> should be for a given minimum frequency, and what the spacing between the
>> conductors should be. I assume that the spacing of the conductors has a
>> lot to do with the balun ratio and terminating resistor.
>>
>> I guess if I can find the length, conductor spacing, and terminating
>> resistor value needed for 2 MHz minimum and 4:1 W2AU balun I should be
>> all

>> set.
>>
>> Thanks...
>>
>
> The terminating resistor of a B&W antenna is 600 ohms resistive i.e.
> there is a 600 ohm resistor connected to the ends of the folded dipole
> antenna. It's purpose is to swamp the current leftover when the standing
> wave is formed. The balun is of necessity a 12 to 1 ratio balun. Other
> values may be used to other effects.

I don't know that the balun ratio corresponds to the resistor value
necessarily, although it's true that B&W's patent essentially says that.
One might spend a few minutes modeling various combinations to find out.

Looking at W4RNL's page:
http://www.cebik.com/wire/t2fd.html
says
"(The general recommendation is to use a terminating resistor that is
about 5% to 10% higher in value than the feedline characteristic
impedance.)"

One might also look at B&W's patent (4,423,423)
http://patft.uspto.gov/netahtml/PTO/srchnum.htm

"The non-inductive resistive network 78 is preferably a single wire
wound resistor having an impedance dependent upon the selected frequency
range of the antenna. This impedence must be totally non-inductive for
the antenna to function properly. The resistive network 78 must also
have a power dissipation capability which should be at least one quarter
of the power transferred through the antenna matching means 46 to the
antenna from the radio frequency generator. Of course, in order that the
environment not affect the operation of the resistive network 78 the
casing 80 should be weather proof.

The antenna balancing or load impedance is chosen to give the antenna
its broad band characteristics while retaining its shorter overall
length. It has been found that a load impedance in the range of 100-900
ohms will work satisfactorily with an antenna having a frequency range
of 3.5-30 MHz and an overall length between 50 and 130 feet. A load
impedance of 600 ohms is preferred because it increases the bandwidth of
the antenna while decreasing the voltage standing wave ratio associated
with each frequency in the 3.5-30 MHz range. Since the output impedance
of the radio frequency generator is most often 50 ohms, the ratio
between the two coils 74, 76 of the antenna matching means 46 will be
12:1. The antenna load impedance of 600 ohms works equally well with a
frequency range of 7.0-30 MHz. However, for bandwidths which include
lower frequencies, such as 1.8 MHz, and for other frequency ranges of
smaller bandwidths, other impedances in the range of 100-900 ohms may be
preferred in order to decrease the voltage standing wave ratio for those
frequencies while permitting transmission and reception over a
continuous bandwidth. With the use of a smaller impedance in the antenna

balancing means 44, the ratio of the coils 74, 76 in the antenna
matching means 46 and the length of the antenna will vary to reflect
such changes.
"

"An antenna balancing or load impedance of 800 ohms has been found to
cause the antenna 90 to perform quite well where said antenna has a
frequency range of 1.8-22 MHz and an overall length averaging 185 feet.
The 800-ohm load impedance is preferred because it increases the
bandwidth of the antenna while decreasing the voltage standing wave
ratio associated with each frequency in the 1.8-22 MHz range. This
impedance increases the ratio between the antenna matching means and
output impedance of the radio frequency generator to 16:1.
"

> The biggest problem is the balun. I haven't seen any specs for making
> one. The resistors need to be carbon non inductive high wattage.

Or those nice inexpensive Caddock non-inductive resistors available from
Mouser for about $2 each for the low power versions, up to $10 each for
the higher power ones.

http://www.mouser.com/catalog/631/552.pdf

http://www.caddock.com/Online_catalog/Mrktg_Lit/MP9000_Series.pdf

available up to 100W rating (assuming bolted to an appropriate
heatsink). I'd string together a bunch of an appropriate resistance,
either series or parallel, your preference.
>
> Let us know how you do.
>
> Dave WD9BDZ

291. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 23:18:31 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9g7c8$3i6$1@nntp1.jpl.nasa.gov>
Source record: 37505

Jimmie D wrote:
> I need to measure the loss of aproximately 200ft of coax @ a freq of 1Ghz.
> The normal procedure for doing this is to inject a signal at one end and
> measure the power out at the other. Using available test eqipment this is a
> real pain to do. I propose to disconnect the cable at the top of the tower
> terminating it in either a short or open and measure the return loss at the
> source end. I have done this and measured 6.75 db and I am assuming that 1/2
> of this would be the actual loss of the cable. These numbers do fall within
> the established norms for this cable. Can you think of a reason thiis method
> would not be valid?

Sounds right...

Send the signal up, have a loss of 3.375 dB, all of it reflects back
from either short or open, another 3.375 dB loss, so the reflected
signal is down 6.75dB.

If you wanted to get real fancy, you could terminate in a known mismatch
too..

But that's getting up towards doing port cals on a VNA.

I assume you're not looking for tenth of a dB precision?

Jim

292. Re: Looking for advice on CAP/MARS antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-09 23:27:26 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9g7su$3kt$1@nntp1.jpl.nasa.gov>
Source record: 37506

Rick (W-A-one-R-K-T) wrote:
> I'm quite active in CAP and MARS and so I need to be able to operate on a
> fairly long list of frequencies between about 2.2 MHz and about 27 MHz
> (actually up to 24 MHz would probably be OK, not much goes on above there).

Actually, almost any antenna with a 5 dB attenuator would work. a 5 dB
pad would give you a return loss of -10dB, which is around 1.9:1 VSWR..

According to Cebik's models, the T2FD is down about 6 dB relative to a
dipole, worst case, so it would be almost the same.

All you need to do is build yourself a BIG 6dB attenuator that can
dissipate the power.

293. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 00:49:01 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46bbb5f8$0$3167$4c368faf@roadrunner.com>
Source record: 37507

>
> I assume you're not looking for tenth of a dB precision?
>
> Jim

Actually yes I am..Power must be maintained +- 1db at the antenna.

Jimmie

294. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 01:36:54 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <WiPui.6820$vK2.322@trnddc03>
Source record: 37508

"Jimmie D" <GFENDER@carolina.rr.com> wrote in message
news:46bbb5f8$0$3167$4c368faf@roadrunner.com...
>
>>
>> I assume you're not looking for tenth of a dB precision?
>>
>> Jim
>
> Actually yes I am..Power must be maintained +- 1db at the antenna.
>
> Jimmie

Hi Jimmie

What test equipment are you using to record the 6.75 dB?

Jerry

295. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 01:48:01 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9gg4i$7q9$1@nntp1.jpl.nasa.gov>
Source record: 37509

Jimmie D wrote:
>>I assume you're not looking for tenth of a dB precision?
>>
>>Jim
>
>
> Actually yes I am..Power must be maintained +- 1db at the antenna.

You've got a bit of a challenge, then.. although +/- 1 dB (is that a 1 sigma or a 3 sigma or a absoulate max min spec?) might not require a tenth of a dB precision.

1 dB is 25%
1% is 0.04dB

(measuring power at 1 GHz to 0.1dB absolute is moderately challenging, especially outdoors) For reference, an Agilent E4418 is specified at +/-0.6% (25C +/- 10 degrees).. plus you have a linearity spec which can range from 1% to 4% depending on the relative levels of the reference and unknown.

A good return loss measurement with a decent PNA (like an E8363) should get you down in the sub 0.1dB transmission measurement with overall loss in the 0 to 20dB range, so the measurement is clearly feasible at some level.

The same piece of gear, measuring reflection coefficient (i.e. the put a short or open at the other end, and measure mag(rho) and work back to loss)... you said you have about 6dB return loss, so that's a reflection coefficient (at the analyzer) of about 0.5, and for <2GHz, the uncertainty would be about 0.01 (out of the 0.5), or, call it 2%... again, about a 0.1 dB uncertainty.

OTOH, that's a $50K piece of test gear, sitting in a lab at 25C +/- 1C

There's also the temperature coefficient of the coax to worry about. Copper has a temperature coefficient of 0.4%/degree C. A 10 degree change in temperature is a 4% change in resistance (0.2dB), and the resistance is a big part of the loss (dielectric loss changes differently, and you'd have to worry about the dimensional changes too).

In any case, measuring the loss by terminating it in a reflection is probably the easiest way, and potentially the most precise, because you can have the source and the measurement at the same location. If you tried to measure it by transmission loss (put the source at one end and the detector at the other) you have the problem of the stability of the source. In a bridge type scheme (which the reflection technique is) you

can essentially compare between the unknown (your cable) and a standard, and adjust the standard until they match, so the variations in the power level of the source cancel out (or use something that inherently measures the ratio of the powers).

Something like the LP-100 wattmeter can probably make the measurement. It's good to 5% typical, and can do ratioed/match measurements to much better. I don't know if it can go to 1 GHz, though.

Something like the Anritsu SiteMaster (like the S311D) can do this for sure(after all, it's what it was designed to do.. measure coax on towers) http://www.us.anritsu.com/downloads/files/11410-00419.pdf

If you need to measure loss on the fly, it's a bit trickier, but one way is to put a deliberate small mismatch at the end (i.e. you put a 10 dB directional coupler in the line at the antenna end, with the coupled port terminated into a short). This reflects a known -20dB back down the line. You look for changes in the amount of reflected power. Obviously, if the antenna changes it's reflection, you have to separate that out. There are clever techniques for this too (like having the coupler terminate in a switch that is either a load or a short). This kind of thing is pretty common on antenna measurement ranges, where you need to remove the effects of the feed cable from the measurement.

>
> Jimmie
>
>

296. LPDA in Western Europe

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 03:10:20 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <G4KdnSZWroTuVSbbnZ2dnUVZ_qCgnZ2d@bright.net>
Source record: 37510

Dear Frank:

I remember who distributes Tennadyne antennas in your part of the world.
He is EI0CL. It seems to me that he has a sub-distributor in Spain.

He has a site at:

http://procom-ireland.com/

73, Mac N8TT

From: "J. Mc Laughlin" <jcm@power-net.net>
Subject: Re: 2L Steppir or 2L Cubical quad
Date: Monday, August 06, 2007 10:49 AM

Dear Frank (no call, France?):

Another choice is a log-periodic-dipole-array (LPDA). Several are
available that do a good job of covering 14 MHz to 30 MHz. One such
manufacturer is Tennadyne

http://www.tennadyne.com/specs&prices.htm

The link shows the specifications of most of their models.

LPDAs have no moving parts and everything is in a plane. If you purchase
one, I can offer a couple of very simple (almost no cost) enhancements.

As I recall, Tennadyne has a distributor in your area.

73, Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

"Francis Pinson" <nosnip@free.fr> wrote in message
news:46b5c1c0$0$24146$426a74cc@news.free.fr...
> Tks to read.
>
> What is the best choice for 5 bands (10 to 20m) : 2L Steppir or 2L cubical
> quad ?
>
> What do you think about this ?..... It is for my holidays home...
>
> Nice to read you ... Tks to all
>
> Best 73/DX
>

> Frank
>
>

297. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 04:04:53 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99888F3EBEF5Cnonenowhere@61.9.191.5>
Source record: 37511

Jim Lux <james.p.lux@jpl.nasa.gov> wrote in news:f9gg4i$7q9$1
@nntp1.jpl.nasa.gov:

...

Jim good points and all noted.

Jimmie hasn't give a lot of detail about the specification he is apparently trying to meet. Reading between the lines, it might be an EIRP, and assuming a given antenna gain, he is trying to calculate the permitted transmitter power output.

Not only is the uncertainty of practical service equipment an issue in tenth dB accuracy, but no mention has been made of transmission line loss under mismatch conditions, and mismatch loss.

Jimmie, if you have a plausible story to tell the regulator, then that might suffice.

If you have assessed the Return Loss of a rho=1 termination, then you could use that and the measured Forward and Reverse power using say a Bird 43 at the transmitter end of that known line loss (being half the return loss) to calculate the power absorbed by the load. The calculator at http://www.vk1od.net/tl/vswrc.php does just that. The calculator at http://www.vk1od.net/tl/tllc.php could be used to calculate the expected RL of the o/c or s/c line section, just specify a load impedance of 1e6 or 1e-6 for each case. For example, at 1GHz, the RL of 200' LDF4-50A with a 1e-6 load is 8.9dB, and if you got much higher than that, you might suspect the cable to be faulty.

Tenths of a dB, remember that most service type power meters are probably good for 6% to 10% of FSD, so I will go with Jim's 1dB accuracy.

BTW, directional wattmeters for the ham market are often not capable of reasonable accuracy on loads other than the nominal 50 ohm load. There are a range of tests that such an instrument should satisfy, but for hams, it is usually considered sufficient if the "reflected" reading is approximately zero on a 50 ohm load.

Owen

298. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 04:51:56 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46bbef00$0$9011$4c368faf@roadrunner.com>
Source record: 37512

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message
news:f9gg4i$7q9$1@nntp1.jpl.nasa.gov...
> Jimmie D wrote:
>>>I assume you're not looking for tenth of a dB precision?
>>>
>>>Jim
>>
>>
>> Actually yes I am..Power must be maintained +- 1db at the antenna.
>
> You've got a bit of a challenge, then.. although +/- 1 dB (is that a 1
> sigma or a 3 sigma or a absoulate max min spec?) might not require a tenth
> of a dB precision.
>
>
> 1 dB is 25%
> 1% is 0.04dB
>
> (measuring power at 1 GHz to 0.1dB absolute is moderately challenging,
> especially outdoors) For reference, an Agilent E4418 is specified at
> +/-0.6% (25C +/- 10 degrees).. plus you have a linearity spec which can
> range from 1% to 4% depending on the relative levels of the reference and
> unknown.
>
> A good return loss measurement with a decent PNA (like an E8363) should
> get you down in the sub 0.1dB transmission measurement with overall loss
> in the 0 to 20dB range, so the measurement is clearly feasible at some
> level.
>
> The same piece of gear, measuring reflection coefficient (i.e. the put a
> short or open at the other end, and measure mag(rho) and work back to
> loss)... you said you have about 6dB return loss, so that's a reflection
> coefficient (at the analyzer) of about 0.5, and for <2GHz, the uncertainty
> would be about 0.01 (out of the 0.5), or, call it 2%... again, about a 0.1
> dB uncertainty.
>
> OTOH, that's a $50K piece of test gear, sitting in a lab at 25C +/- 1C
>
> There's also the temperature coefficient of the coax to worry about.
> Copper has a temperature coefficient of 0.4%/degree C. A 10 degree change
> in temperature is a 4% change in resistance (0.2dB), and the resistance is
> a big part of the loss (dielectric loss changes differently, and you'd
> have to worry about the dimensional changes too).
>

> In any case, measuring the loss by terminating it in a reflection is
> probably the easiest way, and potentially the most precise, because you
> can have the source and the measurement at the same location. If you
> tried to measure it by transmission loss (put the source at one end and
> the detector at the other) you have the problem of the stability of the
> source. In a bridge type scheme (which the reflection technique is) you
> can essentially compare between the unknown (your cable) and a standard,
> and adjust the standard until they match, so the variations in the power
> level of the source cancel out (or use something that inherently measures
> the ratio of the powers).
>
> Something like the LP-100 wattmeter can probably make the measurement.
> It's good to 5% typical, and can do ratioed/match measurements to much
> better. I don't know if it can go to 1 GHz, though.
>
>
> Something like the Anritsu SiteMaster (like the S311D) can do this for
> sure(after all, it's what it was designed to do.. measure coax on towers)
> http://www.us.anritsu.com/downloads/files/11410-00419.pdf
>
> If you need to measure loss on the fly, it's a bit trickier, but one way
> is to put a deliberate small mismatch at the end (i.e. you put a 10 dB
> directional coupler in the line at the antenna end, with the coupled port
> terminated into a short). This reflects a known -20dB back down the line.
> You look for changes in the amount of reflected power. Obviously, if the
> antenna changes it's reflection, you have to separate that out. There are
> clever techniques for this too (like having the coupler terminate in a
> switch that is either a load or a short). This kind of thing is pretty
> common on antenna measurement ranges, where you need to remove the effects
> of the feed cable from the measurement.
>
>
>
>>
>> Jimmie

Sounds like using my network analyser to measure return loss at the TX in an
envoromentally stabalized building is going to be a lot better than taking
my HP power meter up on the antenna in the middle of the night to measure
the power level at the end of the cable.

Jimmie

299. Re: Building a T2FD antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 04:56:48 UTC
From: Robert Smits <bob@rsmits.ca>
Message-ID: <e1a0a14c18ff8a9865ad7e9f8f6db674@grapevine.islandnet.com>
Source record: 37513

Rick (W-A-one-R-K-T) wrote:

> I've pretty much decided to go ahead and build a T2FD "radiating dummy
> load", hopefully for use from 2 to 24 MHz.
>
> This will be almost (but not quite) exclusively for receiving, wherein my
> limiting factor is usually noise anyway, rather than antenna efficiency.
> If somebody appears on one of the frequencies I scan that I want to talk
> to, if he's not S9 or better I'll likely switch over to a "real" antenna.
> But, the occasional use for transmitting means I'll need the appropriate
> power resistor on the load end (100 watts or so).
>
> You guys have suggested googling for "T2FD" and "TTFD" and I have done
> that, but I haven't yet found anything that really lays out how to design
> and build one of these things, what the formulas are, etc.
>
> Some of the Google hits suggest using baluns and resistor values all the
> way from 11:1 balun, 550 ohm resistor, and 50-ohm coax to 4:1 balun,
> 300-ohm resistor, and 75-ohm coax. Some seem to imply that one should use
> a resistor value equal to the coax impedance times the balun ratio, and
> others say that the resistor value should be some percent higher than the
> coax impedance times the balun ratio (one site suggested 75 ohm coax, 4:1
> balun, and 390-ohm resistor).
>
> Obviously I'd like to do this a cheaply as possible and I do have a W2AU
> 4:1 balun sitting on the shelf here, so would 50 or 75 ohm coax, 4:1
> balun, and anywhere from 300 to 390 ohms for the terminating resistor work
> as well as a higher resistance value and a higher ratio, scarce, and more
> expensive balun?
>
> I have seen formulas, which I can no longer find, that say what the length
> should be for a given minimum frequency, and what the spacing between the
> conductors should be. I assume that the spacing of the conductors has a
> lot to do with the balun ratio and terminating resistor.
>
> I guess if I can find the length, conductor spacing, and terminating
> resistor value needed for 2 MHz minimum and 4:1 W2AU balun I should be all
> set.
>
> Thanks...

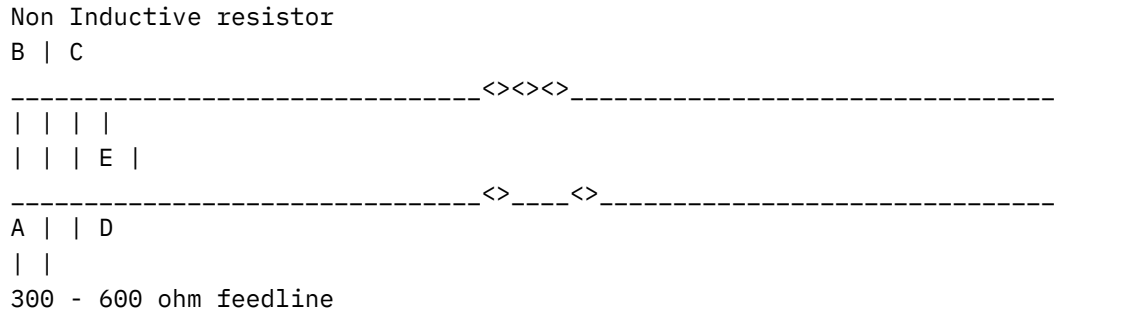
Rick, pretty much the only good treatment of the terminated tilted folded dipole, (T2FD) I've found in Practical Wire Antennas by John Heys, an RSGB book published in 1989.

Apparently there are also articles in June 1949 QST, and CQ Antenna Roundup 1963.

While some describe the T2FD as a broadband resistor, it's most salient characteristics are it's broadband coverage over about a 4:1 ratio, and with the 20 - 40 degree tilt, an aperiodic vertically polarized radiator. It can be fed with 300 ohm line.

The optimum tilt of the antenna is about 30 degrees.

My skills with ascii art aren't that good, but I'll try to describe the antenna.



Of course it must be tilted at 30 deg from vertical.

The length of each leg when measured from the centre of the wires across the spreaders to the feedpoint or terminating resistorshould be 50,000/f(kHz) X 3.28 feet. The total top length and the lengths AB and CD will be twice this calculated length. Frequency f is the lowest operating frequency of the antenna, although it will work at half this frequency with reduced efficiency. The spacing between the two radiator wires in feet is found by dividing 3000 by the frequency in kHz and multiplying this by 3.28.

The terminating resistor must be non-inductive if you want the antenna to work over a large frequency range. It will still work in an inductive resistor is used but it will become resonant on one or more frequencies and the feeder must be used as a tuned line.

The terminating resistor is to some extent determined by the impedance of the feedline. With 300 ohm twin lead, the optimum resistor value is about 400 ohms. With 450 ohm line, a 500 ohm resistor is fine and 600 ohm line needs 650 ohms. Keep in mind that 50% duty cycle of CW or even lower of SSB wattage needed in the resistor. Of course RTTY or FSK will dissipate even more power.

The article suggests that 24 270 ohm 2W carbon film resistors, wired into four lines of six resistors in series, and then paralleled would produce a final resistance value of 405 ohms, and would allow 300 watts on SSB.

Hope this adds to the discussion.

Bob, VE7HS

300. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 05:17:31 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46bbf4ff$0$9007$4c368faf@roadrunner.com>
Source record: 37514

"Owen Duffy" <none@no.where> wrote in message
news:Xns99888F3EBEF5Cnonenowhere@61.9.191.5...
> Jim Lux <james.p.lux@jpl.nasa.gov> wrote in news:f9gg4i$7q9$1
> @nntp1.jpl.nasa.gov:
>
> ...
>
> Jim good points and all noted.
>
> Jimmie hasn't give a lot of detail about the specification he is
> apparently trying to meet. Reading between the lines, it might be an
> EIRP, and assuming a given antenna gain, he is trying to calculate the
> permitted transmitter power output.
>
> Not only is the uncertainty of practical service equipment an issue in
> tenth dB accuracy, but no mention has been made of transmission line loss
> under mismatch conditions, and mismatch loss.
>
> Jimmie, if you have a plausible story to tell the regulator, then that
> might suffice.
>
> If you have assessed the Return Loss of a rho=1 termination, then you
> could use that and the measured Forward and Reverse power using say a
> Bird 43 at the transmitter end of that known line loss (being half the
> return loss) to calculate the power absorbed by the load. The calculator
> at http://www.vk1od.net/tl/vswrc.php does just that. The calculator at
> http://www.vk1od.net/tl/tllc.php could be used to calculate the expected
> RL of the o/c or s/c line section, just specify a load impedance of 1e6
> or 1e-6 for each case. For example, at 1GHz, the RL of 200' LDF4-50A with
> a 1e-6 load is 8.9dB, and if you got much higher than that, you might
> suspect the cable to be faulty.
>
> Tenths of a dB, remember that most service type power meters are probably
> good for 6% to 10% of FSD, so I will go with Jim's 1dB accuracy.
>
> BTW, directional wattmeters for the ham market are often not capable of
> reasonable accuracy on loads other than the nominal 50 ohm load. There
> are a range of tests that such an instrument should satisfy, but for
> hams, it is usually considered sufficient if the "reflected" reading is
> approximately zero on a 50 ohm load.
>
> Owen

I think I have given enough info. But I will try yo expess it in another way.
Power delivered to the antenna but be maintained with in +- 1 db in this case that power is 100 watts. Power is normally
checked at the TX and recorded after allowing for line loss as "power at the antenna". Power checks are done on a weekly basis. Once a year the line loss is measured and this value is used to subtract from the power at the transmitter for the rest of the year. With this in mind it would be most prudent to measure the cable loss accurately. to establish the annual benchmark.

Considering the test equipment I have available to use in a temperature stablized building an Agilent network analyzer or use an old HP power meter at the top of the tower I am thinking that measuring rho of the cable while terminated in a short may be the more accurate way to go.

Jimmie

301. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 05:51:40 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9988A159ECC89nonenowhere@61.9.191.5>
Source record: 37515

"Jimmie D" <GFENDER@carolina.rr.com> wrote in
news:46bbf4ff$0$9007$4c368faf@roadrunner.com:

> I think I have given enough info. But I will try yo expess it in
> another way.
> Power delivered to the antenna but be maintained with in +- 1 db in
> this case that power is 100 watts. Power is normally
> checked at the TX and recorded after allowing for line loss as "power
> at
> the antenna". Power checks are done on a weekly basis. Once a year the
> line loss is measured and this value is used to subtract from the
> power at the transmitter for the rest of the year. With this in mind
> it would be most prudent to measure the cable loss accurately. to
> establish the annual benchmark.

Ok.

You haven't mentioned how you intend to deal with the likely case where
VSWR<>1.

> Considering the test equipment I have available to use in a
> temperature stablized building an Agilent network analyzer or use an
> old HP power meter at the top of the tower I am thinking that
> measuring rho of the cable while terminated in a short may be the more
> accurate way to go.

Yes, especially if the NA is calibrated against o/c, s/c and Zo locally.

If for example, you discover that the one way matched line loss is
6.75/2dB (3.375dB), and you measure the fwd and reflected power at the tx
end to be say 200W and 15W, you could use the calculator I mentioned to
determine that the VSWR at the antenna was 1.36. Using that, and setting
forward power at the antenna to 102W for a net power to the antenna of
99.6W, forward and reflected at the tx end of the line should be 222W and
1.1W.

Of course, if the line was perfectly matched, you could just set the tx
end forward power to 100*10^(3.375/10) or 217W and reflected would be
zero... but that is unlikely. You could take the easier, simpler and
conservative way out and just set it for 217W forward irrespective of
mismatch.

It is splitting hairs, but sometimes precision in the method distracts
attention from accuracy!

Owen

using the calculator I mentioned, and setting the line loss to the tx to
3.375dB, loss to antenna to 0, tx power to

302. Re: Building a T2FD antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 06:34:03 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9h0t9$6ir$1@news.albasani.net>
Source record: 37516

Robert Smits wrote:

> ...
> The article suggests that 24 270 ohm 2W carbon film resistors, wired into
> four lines of six resistors in series, and then paralleled would produce a
> final resistance value of 405 ohms, and would allow 300 watts on SSB.
>
> Hope this adds to the discussion.
>
> Bob, VE7HS

Hmmmm ...

Any suggestions for a method for dumping the heat from the resistors
back into the shack in the wintertime? :-)

And heck, during the winter, wouldn't it be nice to have the resistors
overall rating able to dissipate a KW and provide more heat?

Regards,
JS

303. improvised ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 12:09:08 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46bc5578$0$8980$4c368faf@roadrunner.com>
Source record: 37517

I met a guy at a campground who wants to put up a 1/4 wl verical on 40M but doesnt have room for a good ground system. This is what he wants to try.

He has an old trampoline frame 16ft in dia that has about 120 springs on it so he is going to run 120 wires from a center hub to the outer rail of the frame.
each wire about 8 ft. Then run 5 or 6 wires spaced evenly around the frame on out to the 1/4 wl mark. I was hoping there would be someone willing to model something like this for him. All I have is the free version of EZNEC and dont think it will handle the job.

Jimmie

304. Re: Building a T2FD antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 13:55:01 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <V6_ui.48936$YL5.30875@newssvr29.news.prodigy.net>
Source record: 37518

David G. Nagel wrote:
> The resistors need to be carbon non inductive high wattage.

I have some 50 watt, 600 ohm, non-inductive
resistors removed from a military surplus
antenna tuner.
--
73, Cecil http://www.w5dxp.com

305. Re: Building a T2FD antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 14:01:01 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9hr3blhn1@news.albasani.net>
Source record: 37519

Cecil Moore wrote:

> ...
> I have some 50 watt, 600 ohm, non-inductive
> resistors removed from a military surplus
> antenna tuner.

Cecil:

Welcome back.

In your absence, posters to pick on have been sparse. ;-) Those here
for jest and ridicule have been hard pressed ...

Regards,
JS

306. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 15:51:31 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9i1i3$8v5$1@nntp1.jpl.nasa.gov>
Source record: 37521

> BTW, directional wattmeters for the ham market are often not capable of
> reasonable accuracy on loads other than the nominal 50 ohm load. There
> are a range of tests that such an instrument should satisfy, but for
> hams, it is usually considered sufficient if the "reflected" reading is
> approximately zero on a 50 ohm load.

I should think, though, that one could calibrate such a reflectometer/directional wattmeter. That is, you could test it with a suitable variety of source and load impedances and develop a fairly simple arithmetic correction that would be accurate.

The interesting question might be whether you could unambiguously take a particular fwd and rev reading and turn that into a true fwd and true rev, essentially solving for the mismatch.

Down in the lab here at work we have a whole rack of precision misterminations (1.1:1, 1.2:1, 1.5:1, etc.) that some talented engineer built and calibrated some decades ago. They're built on the Maury bluedot N terminations.

>
> Owen

307. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 15:52:15 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9i1jf$8v5$2@nntp1.jpl.nasa.gov>
Source record: 37522

>
> Sounds like using my network analyser to measure return loss at the TX in an
> envoromentally stabalized building is going to be a lot better than taking
> my HP power meter up on the antenna in the middle of the night to measure
> the power level at the end of the cable.

you betcha..

But you still have the tempco of the cable to agonize about.

308. Help me please!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 15:58:43 UTC
From: "chrisfry.fyi@googlemail.com" <chrisfry.fyi@googlemail.com>
Message-ID: <1186761523.613060.269570@q4g2000prc.googlegroups.com>
Source record: 37520

hi gang, Im a 21 yo student, and im struggling for money.

I have a website parked up for pay per click advertising, Its not alot
of money i get about 5pence per click, but every little helps.
Please goto
http://www.laffo.co.uk

And click a few links no donations or anything let some company give
me money, ive lived in england all my life im your avrg white student
with no help from the government.

Many thanks

Chris fry.

309. Re: Any homebrew auto-tuners?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 17:16:55 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46bc9d86$0$30606$4c368faf@roadrunner.com>
Source record: 37523

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in message
news:pan.2007.08.06.17.38.47.822977@from.qrz.com...
>
> Are there any construction articles around anywhere that describe an
> auto-tuner similar to the LDG and SGC offerings?
>
> I need an auto-tuner that I can control from a laptop, and set frequencies
> as needed (mostly for ALE). I can do the digital design and the software
> in my sleep, for an embedded microprocessor that can control all of that,
> but the heavy-lifting part of the antenna tuner (all the toroids and caps
> and relays) is a bit beyond my capabilities.
>
> If there are any construction articles that I can adapt to my needs that
> would be a very big help.
>
> Thanks...
>
>
ive seen more than a few auto tuners that had lightnig damage to just the
processor that can be had at hamfest. This should supply the caps inductors
and relays you need.

310. Re: Help me please!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 17:24:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7p7pb3hi1j141f49j1tv3b020220a3i3qs@4ax.com>
Source record: 37524

On Fri, 10 Aug 2007 15:58:43 -0000, "chrisfry.fyi@googlemail.com"
<chrisfry.fyi@googlemail.com> wrote:

>hi gang, Im a 21 yo student, and im struggling for money.

ur grammur sujests ur struggling at edjakation 2.

311. Re: Building a T2FD antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 17:40:23 UTC
From: Robert Smits <bob@rsmits.ca>
Message-ID: <d67e8fb5271d02a8fe794523b951ce8f@grapevine.islandnet.com>
Source record: 37525

John Smith I wrote:

> Robert Smits wrote:
>
> > ...
>> The article suggests that 24 270 ohm 2W carbon film resistors, wired into
>> four lines of six resistors in series, and then paralleled would produce
>> a final resistance value of 405 ohms, and would allow 300 watts on SSB.
>>
>> Hope this adds to the discussion.
>>
>> Bob, VE7HS
>
> Hmmmm ...
>
> Any suggestions for a method for dumping the heat from the resistors
> back into the shack in the wintertime? :-)
>
> And heck, during the winter, wouldn't it be nice to have the resistors
> overall rating able to dissipate a KW and provide more heat?
>
> Regards,
> JS

Since the amount of heat dissipated in the resistors will only be 30-40
watts when running 300 watts SSB output, and since they're halfway up the
antenna, I doubt very much that you'd get much heat output.

It's easy to up the wattage rating, but it costs $ to get high wattage
non-inductive resistors.

312. Re: Help me please!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 17:54:53 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <TvWdnej17438OyHbnZ2dnUVZ_oOnnZ2d@comcast.com>
Source record: 37526

<chrisfry.fyi@googlemail.com> wrote in message
news:1186761523.613060.269570@q4g2000prc.googlegroups.com...
> hi gang, Im a 21 yo student, and im struggling for money.
>
> I have a website parked up for pay per click advertising, Its not alot
> of money i get about 5pence per click, but every little helps.
> Please goto
> http://www.laffo.co.uk
>
> And click a few links no donations or anything let some company give
> me money, ive lived in england all my life im your avrg white student
> with no help from the government.
>
> Many thanks
>
> Chris fry.
>
TAKE THIS TRASH SOMEPLACE ELSE

313. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 21:28:41 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99894C136988Dnonenowhere@61.9.191.5>
Source record: 37527

Jim Lux <james.p.lux@jpl.nasa.gov> wrote in news:f9i1i3$8v5$1
@nntp1.jpl.nasa.gov:

>
>> BTW, directional wattmeters for the ham market are often not capable
of
>> reasonable accuracy on loads other than the nominal 50 ohm load. There
>> are a range of tests that such an instrument should satisfy, but for
>> hams, it is usually considered sufficient if the "reflected" reading
is
>> approximately zero on a 50 ohm load.
>
> I should think, though, that one could calibrate such a
> reflectometer/directional wattmeter. That is, you could test it with a
> suitable variety of source and load impedances and develop a fairly
> simple arithmetic correction that would be accurate.

Yes Jim, some of the deficiencies of the instrument fall to things like an equal response from the separate forward and reverse couplers. Scale shape is an issue (especially where the sensitivity is continuously adjustable using a pot). Phase and amplitude response of the coupler over the frequency range is another issue not so readily calibrated out. A coupler that is long will underestimate rho, and some couplers insert more mismatch than they pretend to measure.

In my experience, many of the instruments that are claimed to work up to 144MHz band might well indicate close to 1:1 on a dummy load, but they do not indicate rho=1 on a s/c or o/c. Whilst they may serve their purpose as a null indicator on a 50 ohm load, they are not suited to the loss measurement such as Jimmie is performing.

>
> The interesting question might be whether you could unambiguously take
a
> particular fwd and rev reading and turn that into a true fwd and true
> rev, essentially solving for the mismatch.

I don't think you can compensate for lack of f/b ratio in the coupler, for example because the coupled lines are too long.

>
> Down in the lab here at work we have a whole rack of precision
> misterminations (1.1:1, 1.2:1, 1.5:1, etc.) that some talented engineer
> built and calibrated some decades ago. They're built on the Maury
> bluedot N terminations.

I have always though that a budget priced set of mismatches would be real handy, and have wondered why MFJ (or someone else for that matter) don't offer a set for checking / calibration of the MFJ259B etc.

Owen

314. Re: Building a T2FD antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 22:13:20 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9inucusn1@news.albasani.net>
Source record: 37528

Robert Smits wrote:

> ...
> Since the amount of heat dissipated in the resistors will only be 30-40
> watts when running 300 watts SSB output, and since they're halfway up the

Ohhh, well, that certainly changes everything, doesn't it?

How about just constructing the antenna out of ni-chrome wire, that way
it will be self-defrosting?

Regards,
JS

315. Re: Help me please!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 22:15:38 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9io2lusn2@news.albasani.net>
Source record: 37529

chrisfry.fyi@googlemail.com wrote:
> hi gang, Im a 21 yo student, and im struggling for money.
>
> I have a website parked up for pay per click advertising, Its not alot
> of money i get about 5pence per click, but every little helps.
> Please goto
> http://www.laffo.co.uk
>
> And click a few links no donations or anything let some company give
> me money, ive lived in england all my life im your avrg white student
> with no help from the government.
>
> Many thanks
>
> Chris fry.
>

HEY! You must be a republican politician.

But 'ya got it all wrong, set up a campaign fund and have the nit-wits
make you rich!

Thread Plonk ...

JS

316. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 23:17:32 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1186787852.911382.298850@q75g2000hsh.googlegroups.com>
Source record: 37530

On Aug 9, 10:17 pm, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
> "Owen Duffy" <n...@no.where> wrote in message
>
> news:Xns99888F3EBEF5Cnonenowhere@61.9.191.5...
>
>
>
> > Jim Lux <james.p....@jpl.nasa.gov> wrote in news:f9gg4i$7q9$1
> > @nntp1.jpl.nasa.gov:
>
> > ...
>
> > Jim good points and all noted.
>
> > Jimmie hasn't give a lot of detail about the specification he is
> > apparently trying to meet. Reading between the lines, it might be an
> > EIRP, and assuming a given antenna gain, he is trying to calculate the
> > permitted transmitter power output.
>
> > Not only is the uncertainty of practical service equipment an issue in
> > tenth dB accuracy, but no mention has been made of transmission line loss
> > under mismatch conditions, and mismatch loss.
>
> > Jimmie, if you have a plausible story to tell the regulator, then that
> > might suffice.
>
> > If you have assessed the Return Loss of a rho=1 termination, then you
> > could use that and the measured Forward and Reverse power using say a
> > Bird 43 at the transmitter end of that known line loss (being half the
> > return loss) to calculate the power absorbed by the load. The calculator
> > athttp://www.vk1od.net/tl/vswrc.phpdoes just that. The calculator at
> >http://www.vk1od.net/tl/tllc.phpcould be used to calculate the expected
> > RL of the o/c or s/c line section, just specify a load impedance of 1e6
> > or 1e-6 for each case. For example, at 1GHz, the RL of 200' LDF4-50A with
> > a 1e-6 load is 8.9dB, and if you got much higher than that, you might
> > suspect the cable to be faulty.
>
> > Tenths of a dB, remember that most service type power meters are probably
> > good for 6% to 10% of FSD, so I will go with Jim's 1dB accuracy.
>
> > BTW, directional wattmeters for the ham market are often not capable of
> > reasonable accuracy on loads other than the nominal 50 ohm load. There
> > are a range of tests that such an instrument should satisfy, but for
> > hams, it is usually considered sufficient if the "reflected" reading is

> > approximately zero on a 50 ohm load.
>
> > Owen
>
> I think I have given enough info. But I will try yo expess it in another
> way.
> Power delivered to the antenna but be maintained with in +- 1 db in this
> case that power is 100 watts. Power is normally
> checked at the TX and recorded after allowing for line loss as "power at
> the antenna". Power checks are done on a weekly basis. Once a year the line
> loss is measured and this value is used to subtract from the power at the
> transmitter for the rest of the year. With this in mind it would be most
> prudent to measure the cable loss accurately. to establish the annual
> benchmark.
>
> Considering the test equipment I have available to use in a temperature
> stablized building an Agilent network analyzer or use an old HP power meter
> at the top of the tower I am thinking that measuring rho of the cable while
> terminated in a short may be the more accurate way to go.
>
> Jimmie

As I mentioned before, be sure the cable is really 50 ohm (assuming your instruments are calibrated to 50 ohms), or at least determine what it is. Make your rho measurement; at that length of line, you can adjust the frequency of measurement over a small range and get values for rho at angles of 0 degrees and at 180 degrees. I will assume that the cable is 50 ohms and the cable attenuation changes practically none between the two readings, so the readings will be the same. Now without changing anything, measure an attenuator with nearly the same attenuation your think the cable has, also open-circuited/shorted at the output. If the attenuator has the same attenuation as the line, you should get the same value. You can then have that attenuator calibrated at 1GHz to make sure it's correct. Because your measured attenuation is twice the line attenuation, you will get the line within 1dB if the measurement is within 2dB. It shouldn't be very expensive to get a couple attenuators that would bracket the line loss, and have them calibrated, and expect that they would hold the calibration for a relatively long time if they aren't mistreated. Seems like we never see much variation from one cal to the next of decent attenuators.

As Jim noted, beware of environmental changes. I don't think that dimensional changes will much matter, but the copper resistance will, some. The effect, though, is not nearly as much as Jim suggested, because of skin effect: a 1 degree C change causes the DC resistance to change by 0.4%, but the AC resistance changes by only 0.2%. Since the dB attenuation due to copper resistance is linear with resistance, if the line attenuation is about 3.5dB, you'd need a 10% change in AC resistance to see an 0.35dB change in attenuation. That's a 50 degree C change, perhaps worth worrying about if you're in an extreme

climate. Looking at it another way, it's about 0.007dB/degree C.
It's probably worth making a point to measure the line loss at or near
the temperature extremes it experiences, though that would mean
climbing the tower at a couple times you might least like to. Be sure
moisture doesn't get into the line!

Cheers,
Tom

317. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 23:27:50 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1186788470.852002.260460@b79g2000hse.googlegroups.com>
Source record: 37531

On Aug 10, 2:28 pm, Owen Duffy <n...@no.where> wrote:
...
> I don't think you can compensate for lack of f/b ratio in the coupler,
> for example because the coupled lines are too long.
...
I'm curious what you mean by that, Owen...

Cheers,
Tom

318. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-10 23:48:10 UTC
From: Fred McKenzie <fmmck@aol.com>
Message-ID: <fmmck-83ACAB.19480910082007@nntp.aioe.org>
Source record: 37382

In article <gQr8jUYJFQtGFAeS@ifwtech.co.uk>,
Ian White GM3SEK <gm3sek@ifwtech.co.uk> wrote:

> The SDS+ system is the Bosch company's patented method to build
> hand-held electric drills with a *serious* high-impact hammer action.
> The system has been widely licensed to other manufacturers, so all SDS+
> drills are basically the same. They all have a snap-lock chuck (if it
> has a 3-jaw chuck, it ain't SDS) that takes a wide range of heavy-duty
> drill bits and tools. Most have a shift lever that gives you the choice
> between rotary action on its own, hammer action on its own, or both
> together - all in a drill that you can hold in one hand.

Ian-

Local stores carry the SDS+ drills, but I have been unable to locate a
local source for the 1/2 inch nut driver (socket adapter) to use with it.

I did find a Hitachi part number. A Hitachi dealer called the company
to see about ordering one. Hitachi agreed it was a good number, but
they didn't have any and didn't know how to get them!

There is a company in the UK called ScrewFix.com that advertises them.
However, I don't know how to handle the conversion between dollars and
pounds when paying. I wonder if the credit card company can take care
of that automatically?

Fred
K4DII

319. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 00:29:14 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99896AAF85D3Bnonenowhere@61.9.191.5>
Source record: 37383

K7ITM <k7itm@msn.com> wrote in news:1186788470.852002.260460
@b79g2000hse.googlegroups.com:

> On Aug 10, 2:28 pm, Owen Duffy <n...@no.where> wrote:
> ...
>> I don't think you can compensate for lack of f/b ratio in the coupler,
>> for example because the coupled lines are too long.
> ...
> I'm curious what you mean by that, Owen...

Tom, I was thinking of several instruments, all of the coupled lines type of construction, that on a s/c and o/c failed to indicate rho=1, and showed similar readings when physically reversed, suggesting it was not just a fwd / rev matching issue, there was something about the coupler that was too dependent on the location of the SWR pattern relative to the coupler. Since they worked better at lower frequencies, the length of the coupler was likely to be a contribution.

Owen

320. Re: Building a T2FD antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 00:31:06 UTC
From: Robert Smits <bob@rsmits.ca>
Message-ID: <f72eb54af2633f4475cb299411a8c9b4@grapevine.islandnet.com>
Source record: 37384

John Smith I wrote:

> Robert Smits wrote:
>
> > ...
>> Since the amount of heat dissipated in the resistors will only be 30-40
>> watts when running 300 watts SSB output, and since they're halfway up the
>> >
> Ohhh, well, that certainly changes everything, doesn't it?
>
> How about just constructing the antenna out of ni-chrome wire, that way
> it will be self-defrosting?
>
> Regards,
> JS

Nah, that's totally unnecessary. Given the amount of hot air generated by
the average ham conversation, anyway. :-) :-)

rs@ham.island.net __|
Robert Smits _/. |\
(VE7HS) CQ CQ CQ !!! < (0)
_ /__ |
( ) <_______/
\ \/ __

321. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 04:18:47 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46bd38a7$0$29675$4c368faf@roadrunner.com>
Source record: 37385

"Owen Duffy" <none@no.where> wrote in message
news:Xns99896AAF85D3Bnonenowhere@61.9.191.5...
> K7ITM <k7itm@msn.com> wrote in news:1186788470.852002.260460
> @b79g2000hse.googlegroups.com:
>
>> On Aug 10, 2:28 pm, Owen Duffy <n...@no.where> wrote:
>> ...
>>> I don't think you can compensate for lack of f/b ratio in the coupler,
>>> for example because the coupled lines are too long.
>> ...
>> I'm curious what you mean by that, Owen...
>
> Tom, I was thinking of several instruments, all of the coupled lines type
> of construction, that on a s/c and o/c failed to indicate rho=1, and
> showed
> similar readings when physically reversed, suggesting it was not just a
> fwd
> / rev matching issue, there was something about the coupler that was too
> dependent on the location of the SWR pattern relative to the coupler.
> Since
> they worked better at lower frequencies, the length of the coupler was
> likely to be a contribution.
>
> Owen
>

Would this be a problem for a directional coupler designed for a specific
frequecy?

Jimmie

322. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 04:55:36 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns998997D8D22F4nonenowhere@61.9.191.5>
Source record: 37386

"Jimmie D" <GFENDER@carolina.rr.com> wrote in
news:46bd38a7$0$29675$4c368faf@roadrunner.com:

>
> "Owen Duffy" <none@no.where> wrote in message
> news:Xns99896AAF85D3Bnonenowhere@61.9.191.5...
>> K7ITM <k7itm@msn.com> wrote in news:1186788470.852002.260460
>> @b79g2000hse.googlegroups.com:
>>
>>> On Aug 10, 2:28 pm, Owen Duffy <n...@no.where> wrote:
>>> ...
>>>> I don't think you can compensate for lack of f/b ratio in the
>>>> coupler, for example because the coupled lines are too long.
>>> ...
>>> I'm curious what you mean by that, Owen...
>>
>> Tom, I was thinking of several instruments, all of the coupled lines
>> type of construction, that on a s/c and o/c failed to indicate rho=1,
>> and showed
>> similar readings when physically reversed, suggesting it was not just
>> a fwd
>> / rev matching issue, there was something about the coupler that was
>> too dependent on the location of the SWR pattern relative to the
>> coupler. Since
>> they worked better at lower frequencies, the length of the coupler
>> was likely to be a contribution.
>>
>> Owen
>>
>
> Would this be a problem for a directional coupler designed for a
> specific frequecy?
>
>
> Jimmie

Jimmie, I am talking about the el-cheap inline SWR / Power Meter that is
often sold to hams with unrealistic specs.

You can / should always test the performance of the kit you are using to
determine if you should have confidence in it.

There are a bund of notes on testing a directional wattmeter in the
article at http://www.vk1od.net/VSWR/VSWRMeter.htm .

BTW, for your purposes, if you had a Bird 43 with an element that read upscale on fwd power (250W element for your application), it is all you should need to form a reasonable estimate of line loss and set the transmitter to deliver 100W to the antenna. You might need a smaller slug to make a measurement of RL on a s/c or o/c termination.

Owen

323. Two Good Days Spent with Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 05:18:19 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <vEbvi.29011$Vk6.2479@newsfe07.phx>
Source record: 37387

My friend had a 4-element 2m quad with dangerously high VSWR. Somebody gave it to him (which I guess was the first sign). Yesterday, he brought it by for me to check it out.

I don't have an analyzer (yet) for 2m, but careful VSWR measurements made it look like the antenna was resonant out-of-band low. We carefully measured the driven element length and compared it to the calculated length from the ARRL Antenna Handbook. It was about 1.3 inches too long, so we stripped out the spreaders, redrilled and reassembled with a shorter driven element. Voila! 2.1:1 to 2.4:1 across the bad, with the low point in-band. He went on his way, happy.

Last night I studied a little and saw that the quad loop is normally resonant with about 100 ohms at the feedpoint. I used some # 12 wire to build a 222 MHz quad loop today and, sure enough, 2.1:1 was the best I could do. I remembered the use of a quarter wave section of line as a matching transformer and decided a transformation of 50 --> 75 --> 100 was too easy not to try. At 66% velocity factor, that's just over 23 cm of RG-59.

It worked perfectly. Resulting VSWR was better than 1.4:1 from 222 to 225. From my location south of San Diego, I brought up several distant repeaters (Hollywood Hills, Catalina) and even worked a guy in Santa Barbara through a repeater at his end, over 200 miles away. All this with 5 watts to my humble quad loop on a 9-foot plastic stick tied off to the patio cover.

I understand that a quad loop has a pattern about that of a dipole and a quad array will deliver useful gain with just one parasitic element. Dunno if the parasitic should best be a reflector or a director but I'll find out. I built a reflector but haven't tested it yet in conjuction with the exisiting loop. That's next.

I love this hobby!

"Sal"
(KD6VKW)

324. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 05:56:06 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1186811766.291881.111800@j4g2000prf.googlegroups.com>
Source record: 37388

On Aug 10, 5:29 pm, Owen Duffy <n...@no.where> wrote:
> K7ITM <k7...@msn.com> wrote in news:1186788470.852002.260460
> @b79g2000hse.googlegroups.com:
>
> > On Aug 10, 2:28 pm, Owen Duffy <n...@no.where> wrote:
> > ...
> >> I don't think you can compensate for lack of f/b ratio in the coupler,
> >> for example because the coupled lines are too long.
> > ...
> > I'm curious what you mean by that, Owen...
>
> Tom, I was thinking of several instruments, all of the coupled lines type
> of construction, that on a s/c and o/c failed to indicate rho=1, and showed
> similar readings when physically reversed, suggesting it was not just a fwd
> / rev matching issue, there was something about the coupler that was too
> dependent on the location of the SWR pattern relative to the coupler. Since
> they worked better at lower frequencies, the length of the coupler was
> likely to be a contribution.
>
> Owen

Hi Owen,

I've recently done at least a cursory study of the coupled-line
hybrid, and I found nothing to indicate that directionality is
affected by the line length. In fact, the usual length where it's
practical is 1/4 wave, since that's the length that provides maximum
coupling, and the coupling near that frequency changes only gently
with changes in frequency (falling off on either side). I was
particularly interested in finding that the directionality is
independent of the length, assuming uniform cross-section at least.
If this is in error, I'd really like to know about it, because it
affects something I'm working on.

I'm not sure exactly what sort of bridge is used in microwave network
analyzers; I do know that the ones we build out to a few hundred MHz
use resistive bridges, which are relatively frequency insensitive. (A
key trick is how to read the bridge imbalance without introducing
errors...)

Cheers,
Tom

325. Re: Two Good Days Spent with Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 06:11:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <aokqb3tuk732afoa973pad5pqb0fb168lo@4ax.com>
Source record: 37389

On Fri, 10 Aug 2007 22:18:19 -0700, "Sal M. Onella"
<salmonella@food.poisoning.org> wrote:

>I love this hobby!

Hi Sal,

Good story.

73's
Richard Clark, KB7QHC

326. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 06:13:54 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9989A51F69D45nonenowhere@61.9.191.5>
Source record: 37390

K7ITM <k7itm@msn.com> wrote in
news:1186811766.291881.111800@j4g2000prf.googlegroups.com:

...
> If this is in error, I'd really like to know about it, because it
> affects something I'm working on.

Interesting findings Tom.

The way I think of these couplers is that you are trying to sample V and I at a point on the main line, and a longish coupler of that type departs from that ideal.

The effect I observed, and in several instruments, was obvious and repeatable. I wonder that if the length of the lines is not the cause, if it was the untidiness of the way in which the detector circuit was implemented at each end of the coupler section. Of relevance also, is that insertion of the instruments also caused significant SWR (>1.2 in the case of one of them) at the extreme uppoer end of their specified range. IIRC two of the instruments had no equalisation / compensation, they had a resistor at one end of the coupled line and a cap/diode at the other end.

I still have one of the things that did this, and I have since nulled it for 75 ohms, but I will have a play with it when I get home next week.

Owen

327. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 07:35:46 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <vjC1vRDSbWvGFAt1@ifwtech.co.uk>
Source record: 37391

Fred McKenzie wrote:
>In article <gQr8jUYJFQtGFAeS@ifwtech.co.uk>,
> Ian White GM3SEK <gm3sek@ifwtech.co.uk> wrote:
>
>> The SDS+ system is the Bosch company's patented method to build
>> hand-held electric drills with a *serious* high-impact hammer action.
>> The system has been widely licensed to other manufacturers, so all SDS+
>> drills are basically the same. They all have a snap-lock chuck (if it
>> has a 3-jaw chuck, it ain't SDS) that takes a wide range of heavy-duty
>> drill bits and tools. Most have a shift lever that gives you the choice
>> between rotary action on its own, hammer action on its own, or both
>> together - all in a drill that you can hold in one hand.
>
>Ian-
>
>Local stores carry the SDS+ drills, but I have been unable to locate a
>local source for the 1/2 inch nut driver (socket adapter) to use with it.
>
>I did find a Hitachi part number. A Hitachi dealer called the company
>to see about ordering one. Hitachi agreed it was a good number, but
>they didn't have any and didn't know how to get them!
>
>There is a company in the UK called ScrewFix.com that advertises them.

That's where I bought mine. I have posted a photograph of the whole
setup at:
www.ifwtech.co.uk/g3sek/misc/rod-driver.jpg

The adapter is the object between the socket and the chuck (not quite in
its original condition - the rust and weld spatter are aftermarket
accessories).

As I said earlier, the socket is only there to prevent the driver from
jumping off the end of the ground rod, so it only needs to be a very
loose fit.

>However, I don't know how to handle the conversion between dollars and
>pounds when paying. I wonder if the credit card company can take care
>of that automatically?
>
Yes, that is done automatically. However, you may pay more in shipping
charges and US Customs duty than the cost of the item itself.

Rather than go to all that trouble, you might do better to have
something made locally.

The only special part is the slotted shank that snaps into the chuck. This is exactly the same on every SDS+ drill bit and tool, so you can simply buy the cheapest item you can find (probably a small masonry bit) and chop off the end that you don't need.

Then find a short piece of steel tubing that will slide loosely over the end of your ground rods, and have the two parts welded together.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

328. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 08:33:57 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9989BCDE323CDnonenowhere@61.9.191.5>
Source record: 37392

Ian White GM3SEK <gm3sek@ifwtech.co.uk> wrote in news:vjC1vRDSbWvGFAt1
@ifwtech.co.uk:

...
> The only special part is the slotted shank that snaps into the chuck.
> This is exactly the same on every SDS+ drill bit and tool, so you can
> simply buy the cheapest item you can find (probably a small masonry
bit)
> and chop off the end that you don't need.
>
> Then find a short piece of steel tubing that will slide loosely over
the
> end of your ground rods, and have the two parts welded together.

This can't be too hard, can it Ian!

I just looked on Ebay here in Oz, and I can buy a 20mm SDS chisel for about $14 delivered. I would cut the shank just above the chisel end and slip a 50mm long piece of 20mm NB steel pipe over the remaining shank end, weld it on, and there you go. Ideally, the end of the tool should be harder, but if you are only driving a few rods, you probably won't split the collar.

Wrap your copper clad earth rod with a good few wraps of electrical tape so that the tool does not noodle up the end of the electrode.

Protect your eyes when using this type of tool, especially improvising tools from cheap asian chisels.

Owen

329. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 08:37:21 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9989BD716FAA4nonenowhere@61.9.191.5>
Source record: 37393

K7ITM <k7itm@msn.com> wrote in
news:1186811766.291881.111800@j4g2000prf.googlegroups.com:

...

Tom, for avoidance of doubt, I am not talking about the type of directional coupler that uses a couple line and that you would terminate with matching load. I am talking about the cheap VSWR meters that have about 100mm long coupled line, that is quite tightly coupled, and the resistor at one end of the line is adjusted to balance the electric field sample with the magnetic field sample for a null reading with V/I=Zn.

Owen

330. Re: Hammer drills and ground rods, followup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 09:25:51 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <P$B9Y1IfCYvGFAop@ifwtech.co.uk>
Source record: 37394

Owen Duffy wrote:
>Ian White GM3SEK <gm3sek@ifwtech.co.uk> wrote in news:vjC1vRDSbWvGFAt1
>@ifwtech.co.uk:
>
>...
>> The only special part is the slotted shank that snaps into the chuck.
>> This is exactly the same on every SDS+ drill bit and tool, so you can
>> simply buy the cheapest item you can find (probably a small masonry
>bit)
>> and chop off the end that you don't need.
>>
>> Then find a short piece of steel tubing that will slide loosely over
>the
>> end of your ground rods, and have the two parts welded together.
>
>This can't be too hard, can it Ian!
>
>I just looked on Ebay here in Oz, and I can buy a 20mm SDS chisel for
>about $14 delivered. I would cut the shank just above the chisel end and
>slip a 50mm long piece of 20mm NB steel pipe over the remaining shank
>end, weld it on, and there you go.

Good idea! The shank part of an SDS+ tool is quite a small diameter, so it's a good idea to buy some kind of tool that widens to about the same diameter as the ground rod.

>Ideally, the end of the tool should be
>harder, but if you are only driving a few rods, you probably won't split
>the collar.
>
The collar needs to be a *loose* fit over the rod, so there should be no risk whatever of it splitting.

>Wrap your copper clad earth rod with a good few wraps of electrical tape
>so that the tool does not noodle up the end of the electrode.
>
The ground rod is only mild steel, so the top of it will probably mushroom over anyway (which is the main reason for making the collar a loose fit). In general, you'll have to plan on making the connection a few inches below the very top.

>Protect your eyes when using this type of tool, especially improvising
>tools from cheap asian chisels.

Even the cheapest SDS accessories have to be made from good tool steel, or else they couldn't handle any normal use. Also, the collar acts as a

safety guard around the place where the hammer action is being applied.

However, protection is always a good idea. When you're driving a typical 4ft rod, the action begins right up at chest level, and then moves slowly downward past other vulnerable parts of the anatomy.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

331. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 11:58:36 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46bda46b$0$29678$4c368faf@roadrunner.com>
Source record: 37395

```
"Owen Duffy" <none@no.where> wrote in message
news:Xns998997D8D22F4nonenowhere@61.9.191.5...
> "Jimmie D" <GFENDER@carolina.rr.com> wrote in
> news:46bd38a7$0$29675$4c368faf@roadrunner.com:
>
>>
>> "Owen Duffy" <none@no.where> wrote in message
>> news:Xns99896AAF85D3Bnonenowhere@61.9.191.5...
>>> K7ITM <k7itm@msn.com> wrote in news:1186788470.852002.260460
>>> @b79g2000hse.googlegroups.com:
>>>
>>>> On Aug 10, 2:28 pm, Owen Duffy <n...@no.where> wrote:
>>>> ...
>>>>> I don't think you can compensate for lack of f/b ratio in the
>>>>> coupler, for example because the coupled lines are too long.
>>>> ...
>>>> I'm curious what you mean by that, Owen...
>>>
>>> Tom, I was thinking of several instruments, all of the coupled lines
>>> type of construction, that on a s/c and o/c failed to indicate rho=1,
>>> and showed
>>> similar readings when physically reversed, suggesting it was not just
>>> a fwd
>>> / rev matching issue, there was something about the coupler that was
>>> too dependent on the location of the SWR pattern relative to the
>>> coupler. Since
>>> they worked better at lower frequencies, the length of the coupler
>>> was likely to be a contribution.
>>>
>>> Owen
>>>
>>
>> Would this be a problem for a directional coupler designed for a
>> specific frequecy?
>>
>>
>> Jimmie
>
> Jimmie, I am talking about the el-cheap inline SWR / Power Meter that is
> often sold to hams with unrealistic specs.
>
> You can / should always test the performance of the kit you are using to
> determine if you should have confidence in it.
>
```

> There are a bund of notes on testing a directional wattmeter in the
> article at http://www.vk1od.net/VSWR/VSWRMeter.htm .
>
> BTW, for your purposes, if you had a Bird 43 with an element that read
> upscale on fwd power (250W element for your application), it is all you
> should need to form a reasonable estimate of line loss and set the
> transmitter to deliver 100W to the antenna. You might need a smaller slug
> to make a measurement of RL on a s/c or o/c termination.
>
> Owen

Well it a done deal,
Engineering support came out last night and ran the checks for us while Im on vacation and recovering from minor surgery, Yaaay. They did it the normal way and by measuring the return loss and they decided the "return loss method" worked better. Not sure what better means at this point. accurate enough and easier and faster would constitute better.

Jimmie

332. Re: Two Good Days Spent with Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 12:58:51 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <t0crb3h3hovf0fjtanph793092eprunf24@4ax.com>
Source record: 37396

On Fri, 10 Aug 2007 22:18:19 -0700, "Sal M. Onella"
<salmonella@food.poisoning.org> wrote:

>My friend had a 4-element 2m quad with dangerously high VSWR. Somebody gave
>it to him (which I guess was the first sign). Yesterday, he brought it by
>for me to check it out.

>
>I love this hobby!
>
>"Sal"
>(KD6VKW)
>
Don't overlook that you can parallel two quads to get to 50 ohms as
well!

There is no end to the fun with VHF Quads. About any kind of sticks,
wire and tape will get you going. Don't forget to keep notes, they are
very useful as the learning accelerates.

John Ferrell W8CCW
"Life is easier if you learn to
plow around the stumps"

333. Re: improvised ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 13:17:03 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <b5drb3pluj0ij32fspmj5r5brbv3b59pfn@4ax.com>
Source record: 37397

On Fri, 10 Aug 2007 08:09:08 -0400, "Jimmie D"
<GFENDER@carolina.rr.com> wrote:

>I met a guy at a campground who wants to put up a 1/4 wl verical on 40M but
>doesnt have room for a good ground system. This is what he wants to try.

An interesting idea, but it is doomed by the springs. 120 springs
amount to 240 bad connections that will generate both noise and TVI.
Six radials is not bad for the vertical and I have to wonder if he can
do that many he can do a dozen.

Actually, the 120 wires planned on the trampoline will work very well
on the ground...

John Ferrell W8CCW
"Life is easier if you learn to
plow around the stumps"

334. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 13:34:07 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <aberb3hftkq8ljoo6eblhg01l5so2j8fr4@4ax.com>
Source record: 37398

On Thu, 9 Aug 2007 08:13:45 -0400, "Jimmie D"
<GFENDER@carolina.rr.com> wrote:

>I need to measure the loss of aproximately 200ft of coax @ a freq of 1Ghz.
>The normal procedure for doing this is to inject a signal at one end and
>measure the power out at the other. Using available test eqipment this is a
>real pain to do. I propose to disconnect the cable at the top of the tower
>terminating it in either a short or open and measure the return loss at the
>source end. I have done this and measured 6.75 db and I am assuming that 1/2
>of this would be the actual loss of the cable. These numbers do fall within
>the established norms for this cable. Can you think of a reason thiis method
>would not be valid?
>
>
>Jimmie
>
This is way too complicated for me!
My solution would be to build/buy an RF probe and permanently mount it
at the top of the tower. Bring a pair of wires (Coax if you want it to
look really professional) down to the bottom and measure it whenever
or even all the time.

Climb tower once.

John Ferrell W8CCW
"Life is easier if you learn to
plow around the stumps"

335. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 14:08:55 UTC
From: Inquiry? <quark5@telus.net>
Message-ID: <Xpjvi.73585$Io4.63246@edtnps89>
Source record: 37399

If the speed of the "Drop" is measured in "measurable electricity" - then what is
cycle time of the measuring device in Question?

So, in other words - if the "measuring Device" is working at the same speed of
the thing that it is measuring (or faster) then how can it measure what it is
measuring?

Supposedly the cycle time for low voltage is about 1000 times per second versus
AC which is 60 times per second ... so is the device you are using "capable" of
doing the job at all? Just a Question?

Here is my Web Site URL ... it might have some interesting solutions - or Questions?
http://www3.telus.net/public/quark5/home.html

"Jimmie D" <GFENDER@carolina.rr.com> wrote in message
news:46bb04f9$0$4729$4c368faf@roadrunner.com...
> I need to measure the loss of aproximately 200ft of coax @ a freq of 1Ghz.
> The normal procedure for doing this is to inject a signal at one end and
> measure the power out at the other. Using available test eqipment this is a
> real pain to do. I propose to disconnect the cable at the top of the tower
> terminating it in either a short or open and measure the return loss at the
> source end. I have done this and measured 6.75 db and I am assuming that 1/2
> of this would be the actual loss of the cable. These numbers do fall within
> the established norms for this cable. Can you think of a reason thiis method
> would not be valid?
>
>
> Jimmie
>
>

336. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 17:47:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <kijrb3l9ini96tr30p8e2ie4guoitlqfgr@4ax.com>
Source record: 37400

On Sat, 11 Aug 2007 07:58:36 -0400, "Jimmie D"
<GFENDER@carolina.rr.com> wrote:

>They did it the normal way

Hi Jimmie,

Given the long and winding road to this point, it would give me pause
that suddenly something became "normal." The remainder of your post
is in contradiction to your earlier statement:
>On Thu, 9 Aug 2007 08:13:45 -0400, "Jimmie D" <GFENDER@carolina.rr.com> wrote:
>>The normal procedure for doing this is to inject a signal at one end and
>>measure the power out at the other.
For the sake of clarity (normality aside), what you originally
described Thursday is called "insertion loss."

>On Fri, 10 Aug 2007 01:17:31 -0400, "Jimmie D" <GFENDER@carolina.rr.com> wrote:
>>Power delivered to the antenna but be maintained with in +- 1 db in this
>>case that power is 100 watts. Power is normally
>> checked at the TX and recorded after allowing for line loss as "power at
>>the antenna".
This again defines "insertion loss."

>and by measuring the return loss and they decided the "return loss
>method" worked better.

A description of the classic self-fulfilling prophecy.

I presume you mean this to be "the normal way," but it doesn't really
describe a method or procedure (a "way"); instead, it describes an
outcome. There are many "ways" to measure a characteristic called
"return loss." Some "ways" are more accurate than others.

Having introduced this term, "insertion loss," there remains one more
term to consider: "reflection loss." This and "return loss" can be
found scaled on the common form of the Smith Chart.

The distinction to these terms are that "return loss" and "reflection
loss" are a single port characteristic (that port being the "load"
which, of course, is NOT the antenna, but rather the line and the
antenna). "Insertion loss" is a two port characteristic that properly
conforms to your original question.

ALL such losses are defined by the system within which they reside.
This means you have to also characterize the impedances of BOTH the
load and the source. This last requirement is often dismissed in this
forum where the determination of the source's Z is frequently rejected

as being an impossibility (even when it is specified by the equipment designer).

When Zsource = Zline = Zload, then many complexities are removed. I have seen others ask you the characteristic Z of the load with no response by you; and I am certain you have no comfortable assurance about the Zsource of your transmitter. However, to this last, it would be immaterial if Zline = Zload.

>Not sure what better means at this point. accurate
>enough and easier and faster would constitute better.

This, too, simplifies what is an exceedingly difficult determination (of "return loss," "reflection loss," or "insertion loss") for the accuracy you originally suggested. Accurate, easy, and fast are not normally words used in conjunction except in advertising promotions.

The accuracy of any power determination is related to the known Z of
1. The load;
2. The source;
3. The detector.

At 1 GHz, these determinations are not so easily dismissed as trivial, nor confirmed by dragging a $20,000 analyzer into the shop. The analyzer answers the problem of knowing its own source Z, but it does not answer what that source Z is of the transmitter (again, only a necessity in the face of returned power).

Now, given no one has actually correlated accuracy to any metric here, and given that accuracy is determined in large part by the three Zs above; then a little more discussion is in order. Using only two (the detector and the load could be interchanged for the simpler analysis):
Zsource = 100 Ohms
Zload = 33.3 Ohms

view in fixed font:

1 - Gammaloadï¿½
Error = ------------------------------
(1 ï¿½ Gammasource ï¿½ Gammaload)ï¿½

Error = +0.42dB to -0.78 dB

These errors are independant of other errors such as instrumentation error (meter linearity, conversion problems, ...) or operator errors (reading the meter - a mirrored scale is required to keep this below 5%). Modern instrumentation (if you have the $$$$) solves some of this, others dismiss it as a trivial concern and rely on name brand (Bird is frequently uttered to achieve perfection).

Now, as to the variability in the error wholly associated with just the Zs (providing you can accurately determine them - yes, a game of infinite regress). The allowable error of 1dB is nearly wiped out with some very possible characteristics and you haven't even begun

balancing the error budget. With luck (a fictional village where every armchair technician resides) the error induced by mismatches could be 0. That luck demands you know the length of the line (again, with some accuracy - I enjoy the irony here too). The variation built into the Error computation is from not knowing that length (as is common, few know this with enough precision in wavelengths). At 1 Ghz, the characteristic of
>>aproximately 200ft of coax
is apocryphal.

73's
Richard Clark, KB7QHC

337. Re: improvised ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 18:10:35 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46bdfb99$0$30610$4c368faf@roadrunner.com>
Source record: 37401

"John Ferrell" <johnferrell@sprintmail.com> wrote in message
news:b5drb3pluj0ij32fspmj5r5brbv3b59pfn@4ax.com...
> On Fri, 10 Aug 2007 08:09:08 -0400, "Jimmie D"
> <GFENDER@carolina.rr.com> wrote:
>
>>I met a guy at a campground who wants to put up a 1/4 wl verical on 40M
>>but
>>doesnt have room for a good ground system. This is what he wants to try.
>
> An interesting idea, but it is doomed by the springs. 120 springs
> amount to 240 bad connections that will generate both noise and TVI.
> Six radials is not bad for the vertical and I have to wonder if he can
> do that many he can do a dozen.
>
> Actually, the 120 wires planned on the trampoline will work very well
> on the ground...
>

We were concerned because they would be short, while we had room for the
trampoline frame there was only remove for a few full length radials.

Jimmie

338. Re: improvised ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 18:17:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <30vrb39427ffkrbdnoi4fbf58pa8ee16pt@4ax.com>
Source record: 37402

On Sat, 11 Aug 2007 14:10:35 -0400, "Jimmie D"
<GFENDER@carolina.rr.com> wrote:
>> An interesting idea, but it is doomed by the springs. 120 springs
>> amount to 240 bad connections that will generate both noise and TVI.
>> Six radials is not bad for the vertical and I have to wonder if he can
>> do that many he can do a dozen.
>>
>> Actually, the 120 wires planned on the trampoline will work very well
>> on the ground...
>>
>
>We were concerned because they would be short, while we had room for the
>trampoline frame there was only remove for a few full length radials.

Hi Jimmie,

There is a simple fix to the Doom as it is practiced with spring mount antennas on fenders and bumpers: short the spring with a wire slightly longer than the maximum extension of the spring.

As for the actual wire inside, use Flexweave from the Wireman. It will make storage infinitely easier.

The advantage of the frame and radial pattern will be found for a shorter radiator (even if at the originally planned frequency). Hence a tuner should accompany the package. If I have time this weekend, I will run a model for you.

73's
Richard Clark, KB7QHC

339. Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 19:04:05 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.11.19.03.59.567189@from.qrz.com>
Source record: 37403

What do you all think of using heavy duty nylon rope instead of wire for guys?

I have a Rohn 25G up 50 feet with a 2M/220/440 vertical on a 10-foot mast on top of the tower. It is guyed at 30 feet with standard steel guy wire. I was just up the top of it two days ago installing the vertical, and it seems rock solid.

Now my next project is to put up a 3-element tribander, and while my guess is it'll probably be OK without any additional guying, the paranoid in me says "hey, bozo... put up another set of guys!".

I'm wondering if heavy duty nylon rope will be sufficient. It'll sure be easier to work with, and there won't be the issue of having to break up the guys every so often to keep them from resonating.

There is a ham on the other side of town that has FOUR (4) Rohn 25G's up 120 feet each, arranged in a square, and fed with a phasing network as phased verticals for 80 meters. Each of the four towers is guyed in two or three places with polypropylene rope. Been up a long time and seems OK. But, there isn't a tribander and rotator on top.

340. Re: improvised ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 19:22:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f72sb354rldl81i3mkvnpo5m43ar9phasi@4ax.com>
Source record: 37404

On Sat, 11 Aug 2007 11:17:26 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

> If I have time this weekend, I will run a model for you.

Hi Jimmie,

Time came sooner than I anticipated.

I presumed this tramp'o'tenna wouldn't be raised any higher than 3
feet (which I presumed to be roughly its normal stand configuration)
above ground.

With 120 8 foot radials and a 31 foot radiator, you do encounter a
mismatch with Z at 34 -j134 Ohms. Not bad actually, adding itenerant
extensions would bring in the match, but so would a tuner. I skipped
that exercise. The best launch characteristic stood at -1dB with a
total loss of 6dB. Raising the antenna did little to improve this,
and I doubt you would go 30 feet up to boost the output 1dB.

A shorter radiator of 16 feet with 8 8 foot top hat spokes slanting
down towards the radial rim (guys of part wire, part insulated line)
resulted in a Z at 17 -j8 Ohms. Adding more spokes did not improve
anything (I stumbled on this by accident). Performance was down at
-2dB and total loss at 7dB.

73's
Richard Clark, KB7QHC

341. Re: Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 19:35:02 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <1ff1p4-tr6.ln1@mail.specsol.com>
Source record: 37405

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote:

> What do you all think of using heavy duty nylon rope instead of wire for
> guys?

> I have a Rohn 25G up 50 feet with a 2M/220/440 vertical on a 10-foot mast
> on top of the tower. It is guyed at 30 feet with standard steel guy wire.
> I was just up the top of it two days ago installing the vertical, and it
> seems rock solid.

> Now my next project is to put up a 3-element tribander, and while my guess
> is it'll probably be OK without any additional guying, the paranoid in me
> says "hey, bozo... put up another set of guys!".

> I'm wondering if heavy duty nylon rope will be sufficient. It'll sure be
> easier to work with, and there won't be the issue of having to break up
> the guys every so often to keep them from resonating.

> There is a ham on the other side of town that has FOUR (4) Rohn 25G's up
> 120 feet each, arranged in a square, and fed with a phasing network as
> phased verticals for 80 meters. Each of the four towers is guyed in two
> or three places with polypropylene rope. Been up a long time and seems
> OK. But, there isn't a tribander and rotator on top.

Well, it depends...

Not all plastic rope is UV resistant, so you need to check.

For a given strength, the rope will be thicker and more visible, which
may or may not be a concern to you.

Rope will stretch quite a bit by comparison so the overall structure
won't be as rigid unless you put a LOT of tension on the rope.

Having said that, I have a 40M vertical made of aluminum tubing
guyed with UV resistant rope.

I have to replace the guys every 5 years or so.

--
Jim Pennino

Remove .spam.sux to reply.

342. Re: Building a T2FD antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 20:05:19 UTC
From: yea right <spam@spam.spam>
Message-ID: <pan.2007.08.11.20.05.18.83007@spam.spam>
Source record: 37406

On Thu, 09 Aug 2007 16:13:28 -0700, Jim Lux wrote:

> David G. Nagel wrote:
>> Rick (W-A-one-R-K-T) wrote:
>>
<snip>
> Or those nice inexpensive Caddock non-inductive resistors available from
> Mouser for about $2 each for the low power versions, up to $10 each for
> the higher power ones.
>
> http://www.mouser.com/catalog/631/552.pdf
>
> http://www.caddock.com/Online_catalog/Mrktg_Lit/MP9000_Series.pdf
>
>
> available up to 100W rating (assuming bolted to an appropriate heatsink).
> I'd string together a bunch of an appropriate resistance, either series or
> parallel, your preference.
>>

I used one of those resistors (sold as motor shunt resistors) for my antenna and constructed a small 5" by 5" heat sink that flys with the antenna. The commercial balun, ($80USD) which was a bit heavy to mount on the antenna was mounted on a fence post underneath the antenna. I constructed some 450ohm balanced line to go between the balun and antenna.

pics:
http://vambo.org/pictures/antenna/

This antenna has been the greatest thing I've ever done to improve my Hobie. This antenna is about 8 years old and has survived a move to a new QTH.

343. Re: Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 20:30:23 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <rKednYnwneHjgSPbnZ2dnUVZ_oytnZ2d@giganews.com>
Source record: 37407

Rick (W-A-one-R-K-T) wrote:
> What do you all think of using heavy duty nylon rope instead of wire for
> guys?
>
> I have a Rohn 25G up 50 feet with a 2M/220/440 vertical on a 10-foot mast
> on top of the tower. It is guyed at 30 feet with standard steel guy wire.
> I was just up the top of it two days ago installing the vertical, and it
> seems rock solid.
>
> Now my next project is to put up a 3-element tribander, and while my guess
> is it'll probably be OK without any additional guying, the paranoid in me
> says "hey, bozo... put up another set of guys!".
>
> I'm wondering if heavy duty nylon rope will be sufficient. It'll sure be
> easier to work with, and there won't be the issue of having to break up
> the guys every so often to keep them from resonating.
>
> There is a ham on the other side of town that has FOUR (4) Rohn 25G's up
> 120 feet each, arranged in a square, and fed with a phasing network as
> phased verticals for 80 meters. Each of the four towers is guyed in two
> or three places with polypropylene rope. Been up a long time and seems
> OK. But, there isn't a tribander and rotator on top.

The advantage of using rope is that it's nonconductive, which won't distort the HF yagi's radiation pattern. If you are going to use rope, I recommend you take a look at the comparison chart listed on McMaster-Carr's website (http://www.mcmaster.com/). The material and the construction will have something to do with the amount of stretch, UV resistance, etc. You'll see that double-braided polyester or nylon would appear to be good choices for their UV and stretch resistance.

If you don't place the guys immediately under the yagi, metal guys will work fine if you break up any in-band resonances with insulators. For safety, use *only* compression insulators (not strain insulators). I used to have a homebrew 3-el 15m yagi at 38' (26' mast + 12' roof). Originally, I guyed it w/ #14 solid galvanized steel wire. Eventually, the wire rotted-thru, and down she came (it was not a good day). After repairing the yagi, I replaced the guy wire with 1/16" 1x19 strand stainless steel wire rope (500# breaking strength). That lasted another 15 years until I moved. The wire is still like new -- no signs of rot. It was a worthwhile investment. Because of your increased loading, you'd want to use something stronger than what I used.

Bryan WA7PRC

344. Re: Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 21:02:54 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13bs8vqk1n0g2cc@corp.supernews.com>
Source record: 37408

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in message
news:pan.2007.08.11.19.03.59.567189@from.qrz.com...
>
> What do you all think of using heavy duty nylon rope instead of wire for
> guys?
>
> I have a Rohn 25G up 50 feet with a 2M/220/440 vertical on a 10-foot mast
> on top of the tower. It is guyed at 30 feet with standard steel guy wire.
> I was just up the top of it two days ago installing the vertical, and it
> seems rock solid.
>
> Now my next project is to put up a 3-element tribander, and while my guess
> is it'll probably be OK without any additional guying, the paranoid in me
> says "hey, bozo... put up another set of guys!".

You don't want to use the nylon. In a few years the uv rays of the sun will
weaken it. You want to use something made for guying towers. Phillystran
is on type. It is expensive.
http://www.texastowers.com/philly.htm
Has it listed.

Rohn recommends guying a 50 foot tower at the 23 and 45 foot levels. That
is for 3/16 inch steel wire and that cable is rated for about 4000 pounds.
You normally put about 400 pounds of tension on the guy wire. While most
towers will stay up with much less, you can never tell when an ice storm
will hit and a big wind at the same time unless you are in an area that
never gets ice.

You may want to go here and read up on towers.

http://www.qsl.net/n1lo/tower_ref.pdf

345. Re: Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 22:30:24 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <pZKdnS74KvIfpSPbnZ2dnUVZ8qCqnZ2d@pipex.net>
Source record: 37409

Each of the four towers is guyed in two
> or three places with polypropylene rope. Been up a long time and seems
> OK. But, there isn't a tribander and rotator on top.
==========
Polypropylene rope is usually coloured ,blue or yellow or orange or red
. The pigment causes the material to deteriorate due to exposure to UV
(sunlight) .....even here in northern Scotland.
Result : life is approx 8 years
If they would use carbon black (soot) as pigment/filler life of the
material would be infinite ....but then they wouldn't be able to
sell the rope any longer in reasonable quantities.
More expensive alternatives are (black) dacron or polyester rope (the
latter as mostly used for sailing yachts) ;these last for ever.

I currently use polypropylene for guying a 13 metres (43 ft) mast .
The guys have been in use for 7 years and will need to be replaced next
year . I probably will be using polyester rope.

Frank GM0CSZ / KN6WH

346. Re: Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 22:48:23 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns998A599648D98nonenowhere@61.9.191.5>
Source record: 37411

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in
news:pan.2007.08.11.19.03.59.567189@from.qrz.com:

>
> What do you all think of using heavy duty nylon rope instead of wire
> for guys?
>

Synthetic guy material is not new, but I have not seen a commercial structure secured with nylon rope, or any other synthetic cable laid rope.

That might just show my lack of experience, but...

I have seen commercial structures secured with synthetic material designed for the purpose, Phillystran is one of the products that you can Google for more information. They are typically a bundle of straight fibres (Kevlar???) enclosed in a continuous waterproof, UV, acid, alkali resistant plastic sheath and special terminals that achieve high strength and prevent ingress of water (which could support mildew, ice damage etc).

Galvanised HT guy wire is much cheaper than Phillystran.

In this part of the world, permanent guys using (natural or synthetic) fibre rope is not generally permitted, so you would need engineering support to justify such an installation. There are good reasons for this.

Owen

347. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 22:50:29 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1186872629.039568.194430@g12g2000prg.googlegroups.com>
Source record: 37410

On Aug 11, 1:37 am, Owen Duffy <n...@no.where> wrote:
> K7ITM <k7...@msn.com> wrote innews:1186811766.291881.111800@j4g2000prf.googlegroups.com:
>
> ...
>
> Tom, for avoidance of doubt, I am not talking about the type of directional
> coupler that uses a couple line and that you would terminate with matching
> load. I am talking about the cheap VSWR meters that have about 100mm long
> coupled line, that is quite tightly coupled, and the resistor at one end of
> the line is adjusted to balance the electric field sample with the magnetic
> field sample for a null reading with V/I=Zn.
>
> Owen

Hi Owen,

I'm not sure I see the difference. The load on the cheapie you describe is just the load required to terminate that line. I have a freely redistributable field solver program that will calculate the even and odd mode impedances for you from the geometry and the dielectric's permittivity, and from those impedances and the length you can predict the proper termination impedance of both the "through" and the "coupled" lines, and the coupling at any particular frequency. It IS a problem if you try to do it in microstrip because the propagation velocity for the even and odd modes is different, but in true TEM configurations, I believe the directionality is fine if you maintain uniform cross-section. Actually, a way that they make broadband coupled lines is to have a central section tightly coupled, and another section on each end of that which is less tightly coupled. You can extend it to 5 sections or more, to get even broader bandwidth.

Info about them is out there, but it wasn't as easy for me to find as I figured it would be. ;-)

Cheers,
Tom

348. Re: Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 23:02:38 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <6ervi.17616$eO1.2837@bignews6.bellsouth.net>
Source record: 37412

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in message
news:pan.2007.08.11.19.03.59.567189@from.qrz.com...
>
> What do you all think of using heavy duty nylon rope instead of wire for
> guys?
>

Paint it black - and that will strengthen it and protect it from crumbling
from the uv .

349. Re: Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-11 23:21:21 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns998A5F2CC17B6nonenowhere@61.9.191.5>
Source record: 37413

"Hal Rosser" <hmrosser@bellsouth.net> wrote in
news:6ervi.17616$eO1.2837@bignews6.bellsouth.net:

>
> "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in message
> news:pan.2007.08.11.19.03.59.567189@from.qrz.com...
>>
>> What do you all think of using heavy duty nylon rope instead of wire
>> for guys?
>>
>
> Paint it black - and that will strengthen it and protect it from
> crumbling from the uv .
>

It seems it is popularly believed that black rope is more likely to be weatherproof than other colours.

There are a range of ropes with good UV resistance that are white, not by accident, the white colour is a result of the technique used to give them enhanced UV resistance. Look around at ropes used in maritime environments and that last for years, they aren't all black, in fact it is rare to see a dark coloured rope at all.

As to the wisdom of taking a rope of known chemistry, then applying paint of non-specific chemistry to protect it without proper regard to the effect on strength or life... I will leave you to think about that.

In this part of the world, riggers are supposed to inspect working fibre ropes and condemn rope that is contaminated with paint or any type of solvent.

Owen

350. Re: Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-12 01:34:21 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <lstvi.18210$eO1.633@bignews6.bellsouth.net>
Source record: 37414

>>>
>>> What do you all think of using heavy duty nylon rope instead of wire
>>> for guys?
>>>
>>
>> Paint it black - and that will strengthen it and protect it from
>> crumbling from the uv .
>>
>
> It seems it is popularly believed that black rope is more likely to be
> weatherproof than other colours.
>
> There are a range of ropes with good UV resistance that are white, not by
> accident, the white colour is a result of the technique used to give them
> enhanced UV resistance. Look around at ropes used in maritime
> environments and that last for years, they aren't all black, in fact it
> is rare to see a dark coloured rope at all.
============
Especially at night.
=============
>
> As to the wisdom of taking a rope of known chemistry, then applying paint
> of non-specific chemistry to protect it without proper regard to the
> effect on strength or life... I will leave you to think about that.
============
Its an antenna rope - so no dangers lurk.
I did not really check its chemistry.
===========
>
> In this part of the world, riggers are supposed to inspect working fibre
> ropes and condemn rope that is contaminated with paint or any type of
> solvent.
======================
They ought to give those condemned ropes to hams, so they can paint'em and
give'm new life holding up antennas.
=================
>
> Owen

Kool - I'm glad I didn't let one of the riggers from your side of the world
inspect my work. Guys for an antenna will be pretty static so the resulting
stiffness after painting the rope (1/4" cord actually) should not be a
problem.
I used a black latex enamel, strung the rope up and used a "glove" paint-pad

to paint the rope. after it dried, the rope was stronger, and the black coating kept UV from the sun from hitting the nylon directly.
The nylon rope I used was cheap - so probably not UV-resistant on its own. The paint was left over from painting something around the house - so the experiment did not cost too much. But it worked. The paint stayed on - did not flake off, try it.

351. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-12 01:44:08 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <e4psb3liq5k7gie59q097kfqr96j1eakv5@4ax.com>
Source record: 37415

I haven't read all the posts in this thread, so I'm not sure that the method I'm advancing for measuring line
loss has not already been discussed.

The method I'm suggesting measures the input impedance (R and jX) of the line in question with the opposite
end of the line terminated first with an open circuit and then with a short, at a frequency where the line
will be close to lambda/8. With low-loss lines the R component will be very small, requiring an RF impedance
bridge that can produce accurate values of R in the 0.2 to 2-ohm range. (The General Radio GR-1606A is a
typical example, which, while using this procedure, will yield answers of greater accuracy than the methods
described in the current posts.) With the 1/8wl line the + and - reactances appearing in the measurements will
be approximately the value of the line Zo.

The open and short circuit values are then plugged into a BASIC program that I wrote years ago, which appears
in Chapter 15 of both Reflections 1 and 2. It also appears on my web page at www.w2du.com. The program outputs
the line attenuation, the complex Zo, and the electrical length of the line. The program solves the equations
appearing in Chipman's "Theory and Problems of Transmission Lines," Page 135.

On my web page go to 'View Chapters of Reflections 2' and click on Chapter 15 to see the detailed explanation
of the procedure.

The BASIC program TRANSCON (Transmission-line Constants) is listed there, but to save your having to load the
program from the typed list I will email a copy of the actual operable program to anyone who requests it,
addressing your request to walt@w2du.com.

I hope this suggestion will prove to be of value.

Walt, W2DU

352. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-12 02:09:01 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <5bqsb314b3mhmk88idk1qs3ea7k7cqjn7o@4ax.com>
Source record: 37416

On Sat, 11 Aug 2007 21:44:08 -0400, Walter Maxwell <walt@w2du.com> wrote:

>I haven't read all the posts in this thread, so I'm not sure that the method I'm advancing for measuring line
>loss has not already been discussed.
>
>The method I'm suggesting measures the input impedance (R and jX) of the line in question with the opposite
>end of the line terminated first with an open circuit and then with a short, at a frequency where the line
>will be close to lambda/8. With low-loss lines the R component will be very small, requiring an RF impedance
>bridge that can produce accurate values of R in the 0.2 to 2-ohm range. (The General Radio GR-1606A is a
>typical example, which, while using this procedure, will yield answers of greater accuracy than the methods
>described in the current posts.) With the 1/8wl line the + and - reactances appearing in the measurements will
>be approximately the value of the line Zo.
>
>The open and short circuit values are then plugged into a BASIC program that I wrote years ago, which appears
>in Chapter 15 of both Reflections 1 and 2. It also appears on my web page at www.w2du.com. The program outputs
>the line attenuation, the complex Zo, and the electrical length of the line. The program solves the equations
>appearing in Chipman's "Theory and Problems of Transmission Lines," Page 135.
>
>On my web page go to 'View Chapters of Reflections 2' and click on Chapter 15 to see the detailed explanation
>of the procedure.
>
>The BASIC program TRANSCON (Transmission-line Constants) is listed there, but to save your having to load the
>program from the typed list I will email a copy of the actual operable program to anyone who requests it,
>addressing your request to walt@w2du.com.
>
>I hope this suggestion will prove to be of value.
>
>Walt, W2DU
>
Some additional information that can make it easier to follow the procedure. The section of Chapter 15

describing the line attenuation measurement procedure is Sec 15.3.1, Calibration of the Feedline, Page 15-3,
Chapter 15, and the table showing the results using the TRANSCON program is Fig 15-1, Page 15-4 The TRANSCON
program listing is on Page 15-22.

Walt, W2DU

353. Re: Confused over coax and windom - newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-12 02:32:02 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46be7121$0$30635$4c368faf@roadrunner.com>
Source record: 37417

<no@spam.net> wrote in message
news:qblgb3d3939f1l5v80lsk240k2m8gmij3m@4ax.com...
> On older models of Carolina Windoms, the line isolator was simply a
> piece of RG-8x coax, with one end wrapped around a ferrite rod (and
> housed inside a piece of PVC).
>
> If you do away with the line isolator and hook your coax directly to
> the balun (I think they use a 4:1), you should receive signals just
> like any other dipole. If you do not, I'd say the balun is bad. If
> you do, then the line isolator is bad.
>
> If this is a new antenna from Radio Works, they will probably make it
> good. If it's a used antenna you can try to fix it yourself. Take a
> hacksaw to the PVC and get it apart. You may find a broken or
> unsoldered wire. You will need some new PVC caps, pipe, glue and such
> to make new housings, but that shouldn't be difficult.
>
> Kingfish
>
>
> On Sun, 27 May 2007 13:40:06 +0100, "Andre C" <nospam@sky.com> wrote:
>
>>I am very new at ham radio and find myself confused over an installation
>>of a Carolina windom 80 special.
>>
>>I attatched a 20m run of coax to the line isolator. When I switch on the
>>rig I get nothing, even on strong BC stations.
> I assumed it was a coax prob and striped my plugs down etc. I then
> discovered that if the shielding was not touching the socket on the
> rig I got a very good signal. So I assumed there was a short in the
> coax. I checked the plugs and they seem fine but I note that even when
> I have just the co-ax plugged in (ie no windom) I get a good signal
> unless the shielding is connected. (I guess that would make sense
> though I thought the shielding stopped the centre core picking up a
> signal.
>>
>>So where is my problem? Is it the antenna? Is it the ine isolator. (There
>>is no indicator which way round it goes so
> I presume it is universal.) I have no tset equipment as yet so an
> easy solution would be valuable.

I never could really figure out a windom except that the origional was just
a flat top that was tuner friendly on all the ham bands.

Jimmie

354. Re: Confused over coax and windom - newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-12 03:28:23 UTC
From: dplatt@radagast.org
Message-ID: <nbb2p4-0v3.ln1@radagast.org>
Source record: 37418

In article <46be7121$0$30635$4c368faf@roadrunner.com>,
Jimmie D <GFENDER@carolina.rr.com> wrote:

>I never could really figure out a windom except that the origional was just
>a flat top that was tuner friendly on all the ham bands.

As I understand it, the original Windom is essentially a vertical
radiator, with an asymmetrical capacitive "top-hat" (which will
probably radiate at least a bit because of its asymmetry), bottom-fed,
working against the station's RF ground. It's simply a form of
Marconi antenna.

The "Carolina Windom" is a very different sort of antenna... AIUI it's
a off-center-fed doublet which (by design) also has some
vertically-polarized radiation from the upper portion of its coaxial
feedline.

Although the two have a superficial resemblance, I believe that the
two types have very different distributions of RF current, feedpoint
impedances, and (probably) radiation patterns and polarization
distributions.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

355. Re: Two Good Days Spent with Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-12 05:06:16 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <dzwvi.84118$dI1.27274@newsfe08.phx>
Source record: 37451

"John Ferrell" <johnferrell@sprintmail.com> wrote in message
news:t0crb3h3hovf0fjtanph793092eprunf24@4ax.com...

> >
> Don't overlook that you can parallel two quads to get to 50 ohms as
> well!

OK, I took a mental excursion in that direction. My first thought is to use two runs of RG-62 93-ohm computer drop cable off a t-connector. This goes against my grain -- I've always hated using any t-connectors in a matched system -- but I guess the match will be maintained.

My second thought is to literally parallel them at the end of a hunk of 50-ohm cable. That feed would need to be crossed over, I think, so the fields would be additive. Easy enough to test it both ways, I suppose. If crossover is needed, what would the pattern look like without it? Hm-m-m-m ... near-field cancellation and no pattern? Pattern rotation?

Of course I will be trying this next idea even if no newsgroup answer is forthcoming: What happens if I tap off quad #1 on the side _opposite_ where I'm feeding it and connect quad #2 there? Wouldn't this additional load reflect back to feed #1 and lower its impedance toward 50 ohms? I don't know what feed #2 would be. Perhaps a jury-rig parallel line calculated to be 100 ohms would do it. (# 10 AWG wires on 5 mm centers would do it.) Phasing will be an issue.
[I probably don't have a suitable test environment to tell success from failure.]

73,
"Sal"

356. Re: improvised ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-12 13:04:36 UTC
From: Jay in the Mojave <jay123a@qnet.com>
Message-ID: <13bu1b63n5gsf2d@corp.supernews.com>
Source record: 37419

Hello Jimmie:

Go ahead and spring for Roys Eznec. I think its up at version 5.0. If you want to play your going to have to pay. It offers a the smith chart for the antenna impedance which I like, for matching.

If a 1/4 wave 40 meter vertical is being used then it shouldn't be a big deal to run the ground wires. I'd loose the springs tho.

I helped take down two towers of a SK, who
had his towers shut feed for 80 and 160, and used a massive ground wires. This antenna system was all modeled on Eznec.

Jay in the Mojave

Jimmie D wrote:

> I met a guy at a campground who wants to put up a 1/4 wl verical on
> 40M but doesnt have room for a good ground system. This is what he
> wants to try.
>
> He has an old trampoline frame 16ft in dia that has about 120 springs
> on it so he is going to run 120 wires from a center hub to the outer
> rail of the frame. each wire about 8 ft. Then run 5 or 6 wires spaced
> evenly around the frame on out to the 1/4 wl mark. I was hoping there
> would be someone willing to model something like this for him. All I
> have is the free version of EZNEC and dont think it will handle the
> job.
>
>
> Jimmie
>
>

357. Re: Confused over coax and windom - newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-12 13:27:42 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <iVDvi.33094$2v1.32763@newssvr14.news.prodigy.net>
Source record: 37420

Dave Platt wrote:
> In article <46be7121$0$30635$4c368faf@roadrunner.com>,
> Jimmie D <GFENDER@carolina.rr.com> wrote:
>
>> I never could really figure out a windom except that the origional was just
>> a flat top that was tuner friendly on all the ham bands.
>
> As I understand it, the original Windom is essentially a vertical
> radiator, with an asymmetrical capacitive "top-hat" (which will
> probably radiate at least a bit because of its asymmetry), bottom-fed,
> working against the station's RF ground. It's simply a form of
> Marconi antenna.
>
> The "Carolina Windom" is a very different sort of antenna... AIUI it's
> a off-center-fed doublet which (by design) also has some
> vertically-polarized radiation from the upper portion of its coaxial
> feedline.
>
> Although the two have a superficial resemblance, I believe that the
> two types have very different distributions of RF current, feedpoint
> impedances, and (probably) radiation patterns and polarization
> distributions.

Yes, my 1957 ARRL Handbook makes the distinction between
the single-wire feed of the Windom vs the transmission
line feed of an Off-Center Fed (OCF) dipole. The currents
at the vertical wire to horizontal wire junction in a Windom
are flowing in opposite directions in the horizontal wire.
The currents at the Carolina Windom's coax to horizontal
wire interface are flowing in the same direction, more like
an OCF dipole than a Windom. It was probably a marketing
ploy to call it a "Windom" when it was not. "Carolina OCF"
doesn't have much of a ring to it.
--
73, Cecil http://www.w5dxp.com

358. Re: improvised ground system

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-12 15:00:53 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46bf20a0$0$4923$4c368faf@roadrunner.com>
Source record: 37421

"Jay in the Mojave" <jay123a@qnet.com> wrote in message
news:13bu1b63n5gsf2d@corp.supernews.com...
> Hello Jimmie:
>
> Go ahead and spring for Roys Eznec. I think its up at version 5.0. If
> you want to play your going to have to pay. It offers a the smith chart
> for the antenna impedance which I like, for matching.
>
> If a 1/4 wave 40 meter vertical is being used then it shouldn't be a big
> deal to run the ground wires. I'd loose the springs tho.
>
> I helped take down two towers of a SK, who
> had his towers shut feed for 80 and 160, and used a massive ground
> wires. This antenna system was all modeled on Eznec.
>
> Jay in the Mojave
Im afraid if I did that I would kill more time on the PC than I do now.

Jimmie

359. Patch antenna Polarization?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-12 19:25:30 UTC
From: mike <amdx@knology.net>
Message-ID: <a1fae$46bf5ead$45013910$3419@KNOLOGY.NET>
Source record: 37422

What is altered to change polarization (V/H) on a square patch antenna?
I see the corners are cut to make it circular polarization.
But how do you force horizontal or vertical on a square patch?
Mike

360. Can you help identify this rotator?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-12 21:29:20 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.12.21.29.18.205992@from.qrz.com>
Source record: 37423

I found a rotator in some of my silent-key father's stuff and I'm trying to identify it. There is no control box (yet ... it may still be around here someplace) and if I can't find it I'll want to try to buy another one.

See the following URLs:

http://www.rkt-tech.com/rotator/DSCF0002.JPG
http://www.rkt-tech.com/rotator/DSCF0003.JPG
http://www.rkt-tech.com/rotator/DSCF0004.JPG
http://www.rkt-tech.com/rotator/DSCF0005.JPG
http://www.rkt-tech.com/rotator/DSCF0006.JPG

The first one shows the rotator sitting next to a plastic gallon milk jug, for size comparison.

The rest show different views of the rotator.

It looks like maybe a Ham-M or Ham-IV, but my dad also had one of those US Towers crank-up masts, where the whole mast gets rotated, and it seems he had a Tailtwister to turn that ... but this doesn't look big enough to be a Tailtwister.

Any ideas what it might be and where I can get a control box for it?

Thanks...

361. recap

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-12 21:50:50 UTC
From: kb9rqz <kbprqz@punce.net>
Message-ID: <46bf74b1$0$16384$88260bb3@free.teranews.com>
Source record: 37424
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

1) I was draft into the US Army.
2) I is a member of the Chemcal Cops
3) The military wont let me retire.
4) I dosn't serve under the name 'Mark Morgan but that's okay cuz theFBI,
DOD, and CIA have al todl me I candodit.
5) I is on-the-lam from stalking former marines and fatal
atraction four ex-shemale wife almoney
6) I was recenty, paying $5/hr. to acess my ISP
7) I has a 248 IQ, but cant figre out how touse a spel checker.
8) I is a bi-sexual Pagan male ham who like to be spanked.
9) I can't find any action on the military base in Central IL, so I hav to
ask the peple on th USNET.
http://www.marksspamblog.blogspot.com/
10) I punce gotcha

--
Posted via a free Usenet account from http://www.teranews.com

362. kelp is good for you

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-12 21:54:46 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1186955686.893107.31560@22g2000hsm.googlegroups.com>
Source record: 37425
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

On Aug 12, 5:50 pm, "kb9rqz" <kbp...@punce.net> wrote:
> 1) I was draft into the US Army.
never said that

> 2) I is a member of the Chemcal Cops

I said in correect gramaur

> 3) The military wont let me retire.

never said that either

> 4) I dosn't serve under the name 'Mark Morgan but that's okay cuz theFBI,
> DOD, and CIA have al todl me I candodit.

did not say that either

> 5) I is on-the-lam from stalking former marines and fatal
> atraction four ex-shemale wife almoney

absolutely never said that nor is it true

> 6) I was recenty, paying $5/hr. to acess my ISP

no not rrecently

> 7) I has a 248 IQ, but cant figre out how touse a spel checker.

wrong again

> 8) I is a bi-sexual Pagan male ham who like to be spanked.

true enough

> 9) I can't find any action on the military base in Central IL, so I hav to
> ask the peple on th USNET.
nope

on in 9 oh fake

363. Re: Patch antenna Polarization?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-12 22:22:08 UTC
From: nx7u <nx7u@cox.net>
Message-ID: <1186957328.240933.130050@m37g2000prh.googlegroups.com>
Source record: 37426

On Aug 12, 12:25 pm, "mike" <a...@knology.net> wrote:
> What is altered to change polarization (V/H) on a square patch antenna?
> I see the corners are cut to make it circular polarization.
> But how do you force horizontal or vertical on a square patch?
> Mike

E-plane is along the "length" dimension...the E-vector points from the
side with the feed to the opposite side.
Altering the polarization is simple physical rotation, or feeding from
an adjacent side.

364. Re: Patch antenna Polarization?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-12 23:57:45 UTC
From: amdx <amdx@knology.net>
Message-ID: <b4f78$46bf9e6f$18d6b40c$26178@KNOLOGY.NET>
Source record: 37427

"nx7u" <nx7u@cox.net> wrote in message
news:1186957328.240933.130050@m37g2000prh.googlegroups.com...
> On Aug 12, 12:25 pm, "mike" <a...@knology.net> wrote:
>> What is altered to change polarization (V/H) on a square patch antenna?
>> I see the corners are cut to make it circular polarization.
>> But how do you force horizontal or vertical on a square patch?
>> Mike
>
> E-plane is along the "length" dimension...the E-vector points from the
> side with the feed to the opposite side.
> Altering the polarization is simple physical rotation, or feeding from
> an adjacent side.
>
Ok, to make sure I understand;
If I put the feed on the lowerhalf of the patch the antenna would be
vertically polarized?
And, if I put the feed on the left or right half of the patch the antenna
would be horizontally polarized?
Now to complicate things, I see some patches split the difference and put
the feedpoint on the left side of the lowerhalf. What does that do?
Thanks, Mike

365. Re: Questions about mast mounted pre-amps.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 00:07:35 UTC
From: Rob Brown <kb8wws@gmail.com>
Message-ID: <1186963655.721526.192340@57g2000hsv.googlegroups.com>
Source record: 37428

On Aug 7, 8:28 pm, Bob Bob <bob3b...@suddenlink.net> wrote:
> Yeah thats always bad. I chose my XYL to fit in with my hobby <grin>
>
> Of course height isn't as important for sat work than it is for
> terrestrial. You can place small directive arrays on the rooftop and
> steer them easily. I realize you are already Lindenblad bound but 2-3
> element quads or helix antennas are still quite unobtrusive. Another
> possibility is the egg beater type construction that with a simple
> azimuth rotator will give you a few more dB gain than the "full" omni. I
> personally went from a cross dipole to a Lindenblad in my first
> satellite experiments with RS10. Was only running 3W SSB on 2m and it
> was copyable on 10m down to 5 degrees elevation.
>
> But back on the preamp front. I saw Alan's recommendation for the SSB
> Electronics unit. No doubt there is a good reason for such a "high"
> price, but I think I'd stick to building one from cheapish dual gate
> FETs. Granted the NF isn't as low but with average rigs running 4-12dB
> the improvement will still be significant. (Some rigs benefit from
> changing PIN diode T/R switching to a coaxial relay. It really is
> surprising) You may even want to do the maths of determining how much RX
> signal you really need. A satellite is of course listening for signals
> against a large amount of terrestrial noise whereas you are looking up
> at essentially a cold RF sky. One of the reasons now doubt for the
> disparity in ground station vs satellite RF output power.
>
> Down East Microwave do a number of LNA's;
>
> http://www.downeastmicrowave.com
> and a 2m device;http://www.downeastmicrowave.com/PDF/2mlna.PDF
>
> I remember hearing good things about the company maybe 10 years ago.
> They are a around $30-60 for RX only applications.
>
> Sorry I ran out of time web searching. They aren't as prolific as I thought!
>
> I apologize for waffling!
>
> Cheers Bob
>
> Rob Brown wrote:
> > Bob,
> > Thanks for the info.

Bob,
Thanks for the links. Sorry about the late date of this post, but this is the first time I've done anything at home except sleep! We work to play, or that's the way I do it. :)
Thanks again,
Rob Brown
KB8WWS

366. Re: Can you help identify this rotator?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 00:13:16 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <3Nidna6SQsC5PyLbnZ2dnUVZ_uiknZ2d@giganews.com>
Source record: 37429

Rick (W-A-one-R-K-T) wrote:
>
> I found a rotator in some of my silent-key father's stuff and I'm trying
> to identify it. There is no control box (yet ... it may still be around
> here someplace) and if I can't find it I'll want to try to buy another
one.
>
> See the following URLs:
>
> http://www.rkt-tech.com/rotator/DSCF0002.JPG
> http://www.rkt-tech.com/rotator/DSCF0003.JPG
> http://www.rkt-tech.com/rotator/DSCF0004.JPG
> http://www.rkt-tech.com/rotator/DSCF0005.JPG
> http://www.rkt-tech.com/rotator/DSCF0006.JPG
>
> The first one shows the rotator sitting next to a plastic gallon milk jug,
> for size comparison.
>
> The rest show different views of the rotator.
>
> It looks like maybe a Ham-M or Ham-IV, but my dad also had one of those US
> Towers crank-up masts, where the whole mast gets rotated, and it seems he
> had a Tailtwister to turn that ... but this doesn't look big enough to be
> a Tailtwister.
>
> Any ideas what it might be and where I can get a control box for it?
>
> Thanks...
>
It's a CDE T2X or "Tailtwister": http://www.rigpix.com/rotators/rotators.htm
and http://www.rotordoc.com/history.html
73,
Bryan WA7PRC

367. Re: Can you help identify this rotator?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 00:32:58 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.13.00.32.57.776634@from.qrz.com>
Source record: 37430

On Sun, 12 Aug 2007 17:13:16 -0700, Bryan wrote:

> It's a CDE T2X or "Tailtwister"

Ah, so it is the Tailtwister. I would have thought the Tailtwister would have been bigger than that. (I wonder if it will even fit inside my Rohn 25G...)

Anyone know where I can get schematics for the control box? I emailed HyGain / MFJ to see if I could purchase one but if I can build one that'll likely be considerably cheaper...

Thanks...

368. Need an easy VSWR meter for that wifi antenna project?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 00:55:32 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9oa67$1s0$1@news.albasani.net>
Source record: 37431

http://pe2er.nl/wifiswr/

Regards,
JS

369. Will these rotator control boxes work? (was Can you help identify this rotator?)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 01:10:51 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.13.01.10.44.573843@from.qrz.com>
Source record: 37432

Anybody know if these control boxes will work with the Tailtwister?

(Hope the URLs don't get all screwed up by wrapping...

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=190138566499&ssPageName=STRK:MEWA:IT&ih=009

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=320147057504&ssPageName=STRK:MEWA:IT&ih=011

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=130142756941&ssPageName=STRK:MEWA:IT&ih=003

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=220139595415&ssPageName=STRK:MEWA:IT&ih=012

370. antenna parts - superjpole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 02:13:55 UTC
From: DBradley <kb9qhd@gmail.com>
Message-ID: <f9oep3$up0$1@aioe.org>
Source record: 37433

I am interested in building a super jpole as from the arrl manual.
local machine shops are outrageous in pricing a machine job.
Can any one point me to a source of the hardware minus the whips.

371. Re: Confused over coax and windom - newbie

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 02:29:53 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46bfc21b$0$4922$4c368faf@roadrunner.com>
Source record: 37434

"Dave Platt" <dplatt@radagast.org> wrote in message
news:nbb2p4-0v3.ln1@radagast.org...
> In article <46be7121$0$30635$4c368faf@roadrunner.com>,
> Jimmie D <GFENDER@carolina.rr.com> wrote:
>
>>I never could really figure out a windom except that the origional was
>>just
>>a flat top that was tuner friendly on all the ham bands.
>
> As I understand it, the original Windom is essentially a vertical
> radiator, with an asymmetrical capacitive "top-hat" (which will
> probably radiate at least a bit because of its asymmetry), bottom-fed,
> working against the station's RF ground. It's simply a form of
> Marconi antenna.
>
> The "Carolina Windom" is a very different sort of antenna... AIUI it's
> a off-center-fed doublet which (by design) also has some
> vertically-polarized radiation from the upper portion of its coaxial
> feedline.
>
> Although the two have a superficial resemblance, I believe that the
> two types have very different distributions of RF current, feedpoint
> impedances, and (probably) radiation patterns and polarization
> distributions.

I tried to do an analysis on the antenna several years ago having an LCR bridge at my disposal and basically I found an antenna built for the ham bands to be non resonant on any of the ham bands, Had an input impdance of a few hundred ohms on all the hf bands and the reactive portion of the impedance could be handled by most tuners. The relatively high feedpoint impedance probably made it radiate reasonably efficently with even a mediocre ground system.

I think the top hat may have been eithr capacitive or inductive depending on which band you were on and/or which leg of the top hat you were talking about. As I remember an antenna 10 M tall by 10M wide would tune up easily on all the bands 10 thru 80 but I am curious to what the radition patterns would look like. I would think they may not be so good on some of the bands.

Jimmie

372. Re: Will these rotator control boxes work? (was Can you help identify this rotator?)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 02:32:24 UTC
From: gb <w9nogbspam@arrlspamno.net>
Message-ID: <1qWdnVYKj-AhXyLbnZ2dnUVZ_sGvnZ2d@comcast.com>
Source record: 37435

Just go to Norm's Rotor Service FAQ
http://www.rotorservice.com/faqs.htm

14. Can I use a Ham-2 rotor control box with my T2X rotor? Are the Ham-2, Ham-3, Ham-4 and T2X control boxes interchangeable?
Yes, for the most part, all of the 8-wire rotors except for the TR-2 series are interchangeable. You can use a TR-44 series 3; Ham-M series 3, 4, or 5; CD-44/Ham-2; CD-44/Ham-3; Ham-4; or T2X control unit with any of the listed rotors or vice versa. However, the Ham-M and TR-44 series 1 and 2 rotors were wired differently and are not interchangeable with anything else. So, trying to use a series 1 or 2 control on a newer rotor will destroy the rotor pot instantly.

To be sure that you have one of the interchangeable controls, verify that the motor start capacitor is across terminals 4 and 8. To verify that the rotor is one of the interchangeable models, look for the 500-ohm pot resistance across terminals 3 and 7. If your rotor and control unit pass these inspections, they are interchangeable with others which also pass.

17. What gauge of control cable is recommended for various distances between the rotor and the control box?
On the TR-44, CD-44, and CD-45 rotors, the standard control cable includes two #18 conductors and six #22 conductors, and it's fine for runs up to about 300 feet. On the Ham-series rotors and the Tailtwisters, this cable is good up to about 200 feet. If your run exceeds these distances, move up to a heavy-duty cable, which includes two #16 and six #18 conductors which should be good for runs up to 300 feet. For more detailed information on control cables (and coax, too) contact Joel at The RF Connection.

. What is the color code for the cable connecting my rotor and control box?
The colors vary from manufacturer to manufacturer. But it really doesn't make any difference, as long as you make sure that you're connecting terminal 1 on the rotor to terminal 1 on the control box, terminal 2 to terminal 2, and so on. Also, on the HAM series and T2X rotors, you need to be aware that the heavy wires must go to terminals 1 and 2. Norm uses this color code

1. black #18 gauge 2. white #18 gauge 3. green #22 gauge
4. blue #22 gauge

5. orange #22 gauge 6. yellow #22 gauge 7. brown #22 gauge
8. red #22 gauge

3. What is the difference in the Ham series of rotors?

The Ham-M rotor was released in 1957, and there were 5 series with the last rotor being produced in 1973. The Ham-M rotor would have the series number, 1 - 5, followed by 3 digits which indicated the week and year of manufacture. For example, a rotor with the series number 5 322 would be a Ham-M, series 5, manufactured in the twenty-second week (the '22' in '322') of the year 1973 (the '3' in '322').

A Ham-M has a single-levered control box with a meter. In 1973 the mold for making the Ham-M control unit shell was destroyed in a fire. So rather than spend the money to replace the mold, the Ham-2 was born. The rotor was the same as the Ham-M, but the control unit was replaced with a three-button unit with a continuous meter reading.

In 1977 the Ham-3 rotor was released. The Ham-3 supported a new motor with an internal brake, as well as a brass motor gear. The brake wedge was redesigned, as was the brake housing, which gave the new unit a capacity for more wind surface area. The control unit for the Ham-3 supported a new PC-board-mounted meter.

In 1978 the Ham-4 or Ham-IV rotor was released. This rotor had a new steel ring gear and a reinforced upper mast support. The only changes to the control box were the addition of a new face plate, plastic top and bottom covers, and a new meter with reversible meter scales. Also in 1978 the Tailtwister rotor, commonly referred to as the "T2X," was introduced. The T2X is a Ham-4 with an even heavier upper mast support, a heavier brake wedge and brake housing, and 40 additional ball bearings. And the Tailtwister control unit has three LED's that the Ham-4 doesn't have.

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in message news:pan.2007.08.13.01.10.44.573843@from.qrz.com...
>
> Anybody know if these control boxes will work with the Tailtwister?
>
> (Hope the URLs don't get all screwed up by wrapping...
>
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=190138566499&ssPageName=STRK:MEWA:IT&ih=009
>
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=320147057504&ssPageName=STRK:MEWA:IT&ih=011
>
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=130142756941&ssPageName=STRK:MEWA:IT&ih=003
>
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=220139595415&ssPageName=STRK:MEWA:IT&ih=012
>

373. Re: Two Good Days Spent with Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 03:45:21 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <mtQvi.72359$g86.11549@newsfe14.lga>
Source record: 37436

[After sending this, I never saw it posted so I re-sent. Sorry if it's a dupe in your newsreader.]

"John Ferrell" <johnferrell@sprintmail.com> wrote in message news:t0crb3h3hovf0fjtanph793092eprunf24@4ax.com...

> >
> Don't overlook that you can parallel two quads to get to 50 ohms as
> well!

OK, I took a mental excursion in that direction. My first thought is to use two runs of RG-62 93-ohm computer drop cable off a t-connector. This goes against my grain -- I've always hated using any t-connectors in a matched system -- but I guess the match will be maintained.

My second thought is to literally parallel them at the end of a hunk of 50-ohm cable. That feed would need to be crossed over, I think, so the fields would be additive. Easy enough to test it both ways, I suppose. If crossover is needed, what would the pattern look like without it? Hm-m-m-m ... near-field cancellation and no pattern? Pattern rotation?

Of course I will be trying this next idea even if no newsgroup answer is forthcoming: What happens if I tap off quad #1 on the side _opposite_ where I'm feeding it and connect quad #2 there? Wouldn't this additional load reflect back to feed #1 and lower its impedance toward 50 ohms? I don't know what feed #2 would be. Perhaps a jury-rig parallel line calculated to be 100 ohms would do it. (# 10 AWG wires on 5 mm centers would do it.) Phasing will be an issue.
[I probably don't have a suitable test environment to tell success from failure.]

73,
"Sal"

374. Re: Will these rotator control boxes work? (was Can you help identify this rotator?)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 10:57:56 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.13.10.57.44.908978@from.qrz.com>
Source record: 37437

On Sun, 12 Aug 2007 21:32:24 -0500, gb wrote:

> Just go to Norm's Rotor Service FAQ
> http://www.rotorservice.com/faqs.htm

Thanks, GB ... geez, there's a website for everything... :-)

375. Re: antenna parts - superjpole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 11:43:31 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <3os5p4-klh.ln1@p400bob.personal.cox.net>
Source record: 37452

I made mine from 1" PVC pipe and #4 copper wire, stiffened with some dowel.... From Lowes... (And I work for a machine shop...)

Just a thought..

Cheers Bob W5/VK2YQA

DBradley wrote:

> Can any one point me to a source of the hardware minus the whips.

376. Re: Patch antenna Polarization?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 11:47:14 UTC
From: SamSvL <samsvl@nlr.nl>
Message-ID: <Xns998B8BF42F5DAsamsvlnlrnl@192.87.166.15>
Source record: 37438

```
"amdx" <amdx@knology.net> wrote in
news:b4f78$46bf9e6f$18d6b40c$26178@KNOLOGY.NET:

>
> "nx7u" <nx7u@cox.net> wrote in message
> news:1186957328.240933.130050@m37g2000prh.googlegroups.com...
>> On Aug 12, 12:25 pm, "mike" <a...@knology.net> wrote:
>>> What is altered to change polarization (V/H) on a square patch
>>> antenna? I see the corners are cut to make it circular polarization.
>>> But how do you force horizontal or vertical on a square patch?
>>> Mike
>>
>> E-plane is along the "length" dimension...the E-vector points from
>> the side with the feed to the opposite side.
>> Altering the polarization is simple physical rotation, or feeding
>> from an adjacent side.
>>
> Ok, to make sure I understand;
> If I put the feed on the lowerhalf of the patch the antenna would be
> vertically polarized?
> And, if I put the feed on the left or right half of the patch the
> antenna would be horizontally polarized?
> Now to complicate things, I see some patches split the difference and
> put the feedpoint on the left side of the lowerhalf. What does that
> do?
> Thanks, Mike
>
Most probably to achieve circular radiation (e.g. GPS)

Sam
```

377. Baluns - Type 43 vs. Type 73 beads, etc.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 15:19:10 UTC
From: mcclements@gmail.com
Message-ID: <1187018350.267530.276210@22g2000hsm.googlegroups.com>
Source record: 37439

A couple of questions:

1. I have some Type 43 beads that will fit over RG8X that I am putting up. The OD is about a 1/2" inch as is the length. Will this work for ~3.8Mhz and how many of those beads will I need to use? I can get type 77 in the right size, would there be any advantage to using type 77? I would like it to handle legal limit - and I would only run that if the SWR was under 2:1.

2. Why do most 1:1 baluns use that section of RG-303 coax with the small type 73 beads? Is that a teflon coax that can handle heat better?

Thanks!
Scott, WU2X

378. Re: Two Good Days Spent with Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 17:17:03 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <ai31c3tta88n30djb6umq0j85j8qabeu5d@4ax.com>
Source record: 37440

>Of course I will be trying this next idea even if no newsgroup answer is
>forthcoming: What happens if I tap off quad #1 on the side _opposite_
>where I'm feeding it and connect quad #2 there? Wouldn't this additional
>load reflect back to feed #1 and lower its impedance toward 50 ohms? I
>don't know what feed #2 would be. Perhaps a jury-rig parallel line
>calculated to be 100 ohms would do it. (# 10 AWG wires on 5 mm centers would
>do it.) Phasing will be an issue.
>[I probably don't have a suitable test environment to tell success from
>failure.]
>
>73,
>"Sal"
>
>
It is easier and cheaper to do phasing/matching harnesses with open
wire. Make it, don't buy it. Considering that a 1/4 wave is only about
19 inches you can make experiments with whatever wire is handy using
popsicle sticks ("craft sticks" at the craft store) and masking
tapefor the spacers.

Make a field strength meter with a diode and dipole connected to a
multi meter. space it about 30 feet in front of the quad. While
transmitting verify the elements are all working by touching each
element with a screwdriver.

Operate the transmitter at lowest possible power.

Too much fancy equipment gets distracting.

John Ferrell W8CCW
"Life is easier if you learn to
plow around the stumps"

379. Re: Baluns - Type 43 vs. Type 73 beads, etc.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 17:58:53 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <sq61c3pu0m7kfe8lb7sa4oqmull62gjdad@4ax.com>
Source record: 37441

On Mon, 13 Aug 2007 15:19:10 -0000, mcclements@gmail.com wrote:

>A couple of questions:
>
>1. I have some Type 43 beads that will fit over RG8X that I am putting
>up. The OD is about a 1/2" inch as is the length. Will this work for
>~3.8Mhz and how many of those beads will I need to use? I can get type
>77 in the right size, would there be any advantage to using type 77? I
>would like it to handle legal limit - and I would only run that if the
>SWR was under 2:1.
>
>2. Why do most 1:1 baluns use that section of RG-303 coax with the
>small type 73 beads? Is that a teflon coax that can handle heat
>better?
>
Scott, here's a link that you or anyone else contemplating making
baluns should read first.

http://audiosystemsgroup.com/RFI-Ham.pdf

One of the best papers I've seen on the subject.

Danny, K6MHE

380. Re: Baluns - Type 43 vs. Type 73 beads, etc.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 18:15:36 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9q749$g2i$1@nntp1.jpl.nasa.gov>
Source record: 37442

mcclements@gmail.com wrote:
> A couple of questions:
>
> 1. I have some Type 43 beads that will fit over RG8X that I am putting
> up. The OD is about a 1/2" inch as is the length. Will this work for
> ~3.8Mhz and how many of those beads will I need to use? I can get type
> 77 in the right size, would there be any advantage to using type 77? I
> would like it to handle legal limit - and I would only run that if the
> SWR was under 2:1.

See Jim Brown's choke compendium:
http://www.audiosystemsgroup.com/RFI-Ham.pdf

He talks about the tradeoffs between the various materials and design criteria. You can look and see if your 43 will be good enough, or if you should go out and buy something else. There's a new mix, #31, specifically designed for this kind of thing.

#43 is optimized for VHF applications.

There's also the thing that materials that are good for transformers might not be good for chokes (i.e. in a choke, resistance is good, in a transformer, bad).

#43 material apparently also has a thermal runaway problem.. it gets hot, the impedance drops, more heat is dissipated, the impedance drops more, etc.

>
> 2. Why do most 1:1 baluns use that section of RG-303 coax with the
> small type 73 beads? Is that a teflon coax that can handle heat
> better?

yes
Although, one has to wonder about such an economy, since keeping the coax from melting is only part of the story. Heating of the ferrite is bad too. For #43, heating it to 60C drops the permeability by about 20-25% relative to 25C.

>
> Thanks!
> Scott, WU2X
>

381. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 18:35:52 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9q8a8gjt1@nntp1.jpl.nasa.gov>
Source record: 37443

>>Down in the lab here at work we have a whole rack of precision
>>misterminations (1.1:1, 1.2:1, 1.5:1, etc.) that some talented engineer
>>built and calibrated some decades ago. They're built on the Maury
>>bluedot N terminations.
>
>
> I have always though that a budget priced set of mismatches would be real
> handy, and have wondered why MFJ (or someone else for that matter) don't
> offer a set for checking / calibration of the MFJ259B etc.
>
> Owen

I've looked into this, and it's non-trivial to do in small quantities at a (ham)reasonable price. My late father-in-law owned a small company doing video and audio equipment for the broadcast industry, and one of their larger selling product was a high quality 75 ohm BNC termination. However, it took a fair amount of research on his part to find appropriate components from which to assemble them, and even so, I doubt his manufacturing cost was low enough to get to a reasonable retail price for the ham market.

FWIW, 75 ohm terminations are readily available, as a mismatch standard that might be useful. In F connectors they are available for less than a dollar, but I'd be a bit leery of their precision (1% DC resistance is easy to get, but over DC-100 MHz, a bit trickier). Good quality (mechanical and electrical) seem to run about $4-5 each.

In small quantities, it would be hard to make and sell such things for less than about $5 each (by the time you factor in mfr time, material costs), and then there would be shipping. You might be able to do better with selling a set (say, open, short, 50, 25, 75, 100, etc.) because there would be economies of scale, both in mfr and in shipping/handling.

Maybe $30/set plus shipping?

I can see all the folks going.. $30, for half a dozen connectors and resistors? I have a box of connectors out in the shack, and resistors, and I'll just fire up the soldering iron...

382. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 18:50:41 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9q962$h3e$1@nntp1.jpl.nasa.gov>
Source record: 37444

John Ferrell wrote:
> On Thu, 9 Aug 2007 08:13:45 -0400, "Jimmie D"
> <GFENDER@carolina.rr.com> wrote:
>
>
>>I need to measure the loss of aproximately 200ft of coax @ a freq of 1Ghz.
>>The normal procedure for doing this is to inject a signal at one end and
>>measure the power out at the other. Using available test eqipment this is a
>>real pain to do. I propose to disconnect the cable at the top of the tower
>>terminating it in either a short or open and measure the return loss at the
>>source end. I have done this and measured 6.75 db and I am assuming that 1/2
>>of this would be the actual loss of the cable. These numbers do fall within
>>the established norms for this cable. Can you think of a reason thiis method
>>would not be valid?
>>
>>
>>Jimmie
>>
>
> This is way too complicated for me!
> My solution would be to build/buy an RF probe and permanently mount it
> at the top of the tower. Bring a pair of wires (Coax if you want it to
> look really professional) down to the bottom and measure it whenever
> or even all the time.

Considering he needs sub 1dB accuracy, this is challenging..it would
work if you assume your RF probe never needs calibration and is stable
over the environmental range of interest. Not a trivial thing to do.

A diode and a voltmeter certainly won't do it. (A typical diode detector
might vary 1 dB over a 20 degree C range.. judging from the Krytar 700
series data sheet I have sitting here. Granted that's a microwave
detector (100MHz to 40 GHz), but I'd expect similar from most other
diodes. I've given the link to an Agilent Ap note that describes various
detectors in excruciating detail.

A diode, voltmeter, and temperature sensor might work, though.

useful stuff at
http://rfdesign.com/mag/608RFDF2.pdf
http://cp.literature.agilent.com/litweb/pdf/5966-0784E.pdf

383. Re: Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 19:00:41 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <46C0AA59.8050108@jpl.nasa.gov>
Source record: 37447

Rick (W-A-one-R-K-T) wrote:
> What do you all think of using heavy duty nylon rope instead of wire for
> guys?
For a temporary (few week) installation?

Nylon degrades in UV
Nylon is quite stretchy, so you'd better be willing to tolerate a lot of
deflection under load.
Nylon is challenging to attach without severely weakening it (i.e. you
can't just tie any old knot)

OTOH, if you're talking about using something like 11mm static climbing
line and a short tower, you'll probably survive.

>
> I have a Rohn 25G up 50 feet with a 2M/220/440 vertical on a 10-foot mast
> on top of the tower. It is guyed at 30 feet with standard steel guy wire.
> I was just up the top of it two days ago installing the vertical, and it
> seems rock solid.
>
> Now my next project is to put up a 3-element tribander, and while my guess
> is it'll probably be OK without any additional guying, the paranoid in me
> says "hey, bozo... put up another set of guys!".

Run the calculations and see..
Make your own risk assessment..

Your guys attach about halfway up, so you've got a situation where
there's a fair bending moment on the tower, as well as the usual
compression loads on a guyed tower. Bending loads are bad, because they
tend to aggravate the existing tendency to buckle.

>
> I'm wondering if heavy duty nylon rope will be sufficient. It'll sure be
> easier to work with, and there won't be the issue of having to break up
> the guys every so often to keep them from resonating.
>
> There is a ham on the other side of town that has FOUR (4) Rohn 25G's up
> 120 feet each, arranged in a square, and fed with a phasing network as
> phased verticals for 80 meters. Each of the four towers is guyed in two
> or three places with polypropylene rope. Been up a long time and seems
> OK. But, there isn't a tribander and rotator on top.

Sure.. but what you describe is an anecdote, not an analysis. Compare
the kinds of rope (polypropylene vs polyamide (nylon)) and their
respective strengths, aging properties, and elasticity. Compare the wind

loads and their distribution, etc.

The short answer is "probably".. how close to "sure" do you need to be?
A temporary tower in the middle of a cow pasture for a weekend is a lot
different than a permanent installation in a suburban area.

384. Re: Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 19:13:04 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9qag1hqa1@nntp1.jpl.nasa.gov>
Source record: 37448

Hal Rosser wrote:
> "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in message
> news:pan.2007.08.11.19.03.59.567189@from.qrz.com...
>
>>What do you all think of using heavy duty nylon rope instead of wire for
>>guys?
>>
>
>
> Paint it black - and that will strengthen it and protect it from crumbling
> from the uv .
>
>
And pray that whatever you used to paint it with didn't weaken the nylon?

Buy UV resistant rope and the mfr will have pigmented it for you

385. Re: Baluns - Type 43 vs. Type 73 beads, etc.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 19:19:15 UTC
From: mcclements@gmail.com
Message-ID: <1187032755.244978.212200@k79g2000hse.googlegroups.com>
Source record: 37445

Thanks for all the really good references. I was able to get some
Type 31 from Amidon that I am going to go with.

-Scott, WU2X

386. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 19:26:52 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1187033212.375952.156250@q75g2000hsh.googlegroups.com>
Source record: 37446

On Aug 13, 11:50 am, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> John Ferrell wrote:
> > On Thu, 9 Aug 2007 08:13:45 -0400, "Jimmie D"
> > <GFEN...@carolina.rr.com> wrote:
>
> >>I need to measure the loss of aproximately 200ft of coax @ a freq of 1Ghz.
> >>The normal procedure for doing this is to inject a signal at one end and
> >>measure the power out at the other. Using available test eqipment this is a
> >>real pain to do. I propose to disconnect the cable at the top of the tower
> >>terminating it in either a short or open and measure the return loss at the
> >>source end. I have done this and measured 6.75 db and I am assuming that 1/2
> >>of this would be the actual loss of the cable. These numbers do fall within
> >>the established norms for this cable. Can you think of a reason thiis method
> >>would not be valid?
>
> >>Jimmie
>
> > This is way too complicated for me!
> > My solution would be to build/buy an RF probe and permanently mount it
> > at the top of the tower. Bring a pair of wires (Coax if you want it to
> > look really professional) down to the bottom and measure it whenever
> > or even all the time.
>
> Considering he needs sub 1dB accuracy, this is challenging..it would
> work if you assume your RF probe never needs calibration and is stable
> over the environmental range of interest. Not a trivial thing to do.
>
> A diode and a voltmeter certainly won't do it. (A typical diode detector
> might vary 1 dB over a 20 degree C range.. judging from the Krytar 700
> series data sheet I have sitting here. Granted that's a microwave
> detector (100MHz to 40 GHz), but I'd expect similar from most other
> diodes. I've given the link to an Agilent Ap note that describes various
> detectors in excruciating detail.
>
> A diode, voltmeter, and temperature sensor might work, though.
>
> useful stuff athttp://rfdesign.com/mag/608RFDF2.pdfhttp://cp.literature.agilent.com/litweb/pdf/5966-0784E.pdf

Seems like modern RF detector ICs offer much better stability than
diodes. An AD8302, for example, has a typical +/- 0.25dB variation
from -40C to +85C, with a -30dBm signal level. The temperature
variation could be calibrated before installation; if necessary, an
especially temperature-stable part could be selected from a batch.

Then knowing the ambient within 20C would be sufficient. You'd need to arrange sampling at a low level, which could be a well-constructed 90 degree hybrid. With two channels in the AD8302, you could even monitor antenna reflection coefficient (including angle), and be aware of changes there. Analog Devices and Linear Technology both seem to be strong in the RF power monitor IC area.

Cheers,
Tom

387. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 20:09:09 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9qdp6jgq1@nntp1.jpl.nasa.gov>
Source record: 37449

K7ITM wrote:
> On Aug 13, 11:50 am, Jim Lux <james.p....@jpl.nasa.gov> wrote:
>
>>John Ferrell wrote:
>>
>>>On Thu, 9 Aug 2007 08:13:45 -0400, "Jimmie D"
>>><GFEN...@carolina.rr.com> wrote:
>>
>>>>I need to measure the loss of aproximately 200ft of coax @ a freq of 1Ghz.
>>>>The normal procedure for doing this is to inject a signal at one end and
>>>>measure the power out at the other. Using available test eqipment this is a
>>>>real pain to do. I propose to disconnect the cable at the top of the tower
>>>>terminating it in either a short or open and measure the return loss at the
>>>>source end. I have done this and measured 6.75 db and I am assuming that 1/2
>>>>of this would be the actual loss of the cable. These numbers do fall within
>>>>the established norms for this cable. Can you think of a reason thiis method
>>>>would not be valid?
>>
>>>>Jimmie
>>
>>>This is way too complicated for me!
>>>My solution would be to build/buy an RF probe and permanently mount it
>>>at the top of the tower. Bring a pair of wires (Coax if you want it to
>>>look really professional) down to the bottom and measure it whenever
>>>or even all the time.
>>
>>Considering he needs sub 1dB accuracy, this is challenging..it would
>>work if you assume your RF probe never needs calibration and is stable
>>over the environmental range of interest. Not a trivial thing to do.
>>
>>A diode and a voltmeter certainly won't do it. (A typical diode detector
>>might vary 1 dB over a 20 degree C range.. judging from the Krytar 700
>>series data sheet I have sitting here. Granted that's a microwave
>>detector (100MHz to 40 GHz), but I'd expect similar from most other
>>diodes. I've given the link to an Agilent Ap note that describes various
>>detectors in excruciating detail.
>>
>>A diode, voltmeter, and temperature sensor might work, though.
>>
>>useful stuff athttp://rfdesign.com/mag/608RFDF2.pdfhttp://cp.literature.agilent.com/litw
eb/pdf/5966-0784E.pdf
>
>
> Seems like modern RF detector ICs offer much better stability than

> diodes. An AD8302, for example, has a typical +/- 0.25dB variation
> from -40C to +85C, with a -30dBm signal level.
indeed...
The temperature
> variation could be calibrated before installation; if necessary, an
> especially temperature-stable part could be selected from a batch.
> Then knowing the ambient within 20C would be sufficient. You'd need
> to arrange sampling at a low level, which could be a well-constructed
> 90 degree hybrid.

or, even simpler, what about a resistive tap (or a pair of resistive taps separated by a short length of transmission line). If you're sending, say, 100W (+50dBm) up the wire, and you want, say, -30dBm out, you need a 80 dB coupler. Or, something like a 50k resistor into a 50 ohm load will be about 60 dB down, and you could put a 10-20dB pad in before the detector. Calibration would take care of the coupling ratio, although, you might want to be careful about the tempco of the resistor. With two channels in the AD8302, you could even
> monitor antenna reflection coefficient (including angle), and be aware
> of changes there. Analog Devices and Linear Technology both seem to
> be strong in the RF power monitor IC area.

Those are truly nifty parts, and form the basis of some very interesting ham products over the past couple years (like LP-100 vector wattmeter and various ham-oriented VNAs). What would be very cool is if AD would combine something like the 8302 and the A/D so it would have a serial digital output. Pretty close to a powermeter on a chip.

Functionally, this would be close to what you get with a Rhode+Schwartz NRP series, a Boonton 52000, an Agilent U2000
>
> Cheers,
> Tom
>

388. KLM 40M-2B Opinions Please

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 21:15:52 UTC
From: ka9s3@comcast.net
Message-ID: <1187039752.976452.70220@x40g2000prg.googlegroups.com>
Source record: 37450

I have a chance to buy a used two element linearly loaded "shortie-fourty" beam at a low price. It is a KLM 40M-2B. I am a CW only operator, so bandwidth isn't of much concern to me. I would be putting it up at 75 ft.

I would like people's general opinions about this beam compared to other two element loaded 40m beams. Are there any endemic shortcomings with the KLM beam (other than the company is out of business - M2 now gives some support)? Do the lexan element-to-boom saddles hold up?

Thanks - Jeff - KA9S

389. Re: antenna parts - superjpole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 21:36:35 UTC
From: DBradley <kb9qhd@gmail.com>
Message-ID: <f9qit3$qn6$1@aioe.org>
Source record: 37453

Bob Bob wrote:
> I made mine from 1" PVC pipe and #4 copper wire, stiffened with some
> dowel.... From Lowes... (And I work for a machine shop...)
>
> Just a thought..
>
> Cheers Bob W5/VK2YQA
>
> DBradley wrote:
>
>> Can any one point me to a source of the hardware minus the whips.
Thank you for the response. I also made a copper jpole several years
ago. This one is a project with all stainless fittings and fiberglass
material for insulators in the matching section, and the spacer support.
I do not have the book with me - it is at work.

390. Re: Patch antenna Polarization?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-13 22:39:21 UTC
From: nx7u <nx7u@cox.net>
Message-ID: <1187044761.504012.257530@i13g2000prf.googlegroups.com>
Source record: 37454

Yes to both.
A corner-fed patch is roughly circularly polarized...I say roughly
because there are some other pertubations typically made to force the
sense of the CP, and also to improve the circularity.
But if the feed is just offset a bit (like 1/4-3/4 rather than
1/2-1/2)...well that should act similarly to an offset-fed dipole, so
you'd have higher input impedance and some feedpoint reactance. And
the pattern linearity would be more elliptical (patches typically have
relatively high crosspolar response anyway).

>
> Ok, to make sure I understand;
> If I put the feed on the lowerhalf of the patch the antenna would be
> vertically polarized?
> And, if I put the feed on the left or right half of the patch the antenna
> would be horizontally polarized?
> Now to complicate things, I see some patches split the difference and put
> the feedpoint on the left side of the lowerhalf. What does that do?
> Thanks, Mike

391. Re: Patch antenna Polarization?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 00:04:31 UTC
From: amdx <amdx@knology.net>
Message-ID: <74559$46c0f17f$18d6b40c$8380@KNOLOGY.NET>
Source record: 37455

"nx7u" <nx7u@cox.net> wrote in message
news:1187044761.504012.257530@i13g2000prf.googlegroups.com...
> Yes to both.
> A corner-fed patch is roughly circularly polarized...I say roughly
> because there are some other pertubations typically made to force the
> sense of the CP, and also to improve the circularity.
> But if the feed is just offset a bit (like 1/4-3/4 rather than
> 1/2-1/2)...well that should act similarly to an offset-fed dipole, so
> you'd have higher input impedance and some feedpoint reactance. And
> the pattern linearity would be more elliptical (patches typically have
> relatively high crosspolar response anyway).
>
>>
>> Ok, to make sure I understand;
>> If I put the feed on the lowerhalf of the patch the antenna would be
>> vertically polarized?
>> And, if I put the feed on the left or right half of the patch the antenna
>> would be horizontally polarized?
>> Now to complicate things, I see some patches split the difference and put
>> the feedpoint on the left side of the lowerhalf. What does that do?
>> Thanks, Mike
>
My next trick is to put 4 Patch antennas on one plate, I'm looking for the
proper
spacing between Patches. My guide at this point is this site,
http://www.darc.de/distrikte/g/T_ATV/Hybrid-Double-Quad-Array-GB.pdf
the author puts 4 biquads on one plate with proper phaseing and impedance
matching.
The author uses .8 wavelength vertical and .9 wavelength horizontal
spacing betwen centers.
I'm thinking 1.0 wavelength between centers is correct, but open to some
correction factor
for some (unknown to me) characteristic.
Any help and leads appreciated,
Thanks. Mike

392. Can A Patch Ant. be modeled in EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 00:11:31 UTC
From: amdx <amdx@knology.net>
Message-ID: <a1676$46c0f322$18d6b40c$8627@KNOLOGY.NET>
Source record: 37456

Can a Patch Antenna be modeled in EZNEC?
Do you make the flat plates with parrallel lines?
Or is there a function to give you a solid plate?
Mike

393. Re: Can A Patch Ant. be modeled in EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 00:58:34 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9qunrsje1@nntp1.jpl.nasa.gov>
Source record: 37457

amdx wrote:
> Can a Patch Antenna be modeled in EZNEC?
> Do you make the flat plates with parrallel lines?

patches are tough to do a *good* job on with a MoM wire type code (such as NEC, EZNEC, etc.).

A good start is to make a grid of wires, say, 21x21 wires, with the wire diameter chosen so that the surface area is comparable to the gap (that is, if the wires are d cm apart, the wire diameter would be d/pi cm.

Obviously, this breaks down horribly if your microstrip is spaced very close to the ground plane and you use few wires.

You could also download Pozar's free microstrip patch program. PCAAD 2.1 from http://www.antennadesignassociates.com/
Old, DOS style, but works

> Or is there a function to give you a solid plate?
> Mike
>
>

394. Re: Patch antenna Polarization?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 01:06:47 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9qv78ssj1@nntp1.jpl.nasa.gov>
Source record: 37458

amdx wrote:
> "nx7u" <nx7u@cox.net> wrote in message
> news:1187044761.504012.257530@i13g2000prf.googlegroups.com...
>
>>Yes to both.
>>A corner-fed patch is roughly circularly polarized...I say roughly
>>because there are some other pertubations typically made to force the
>>sense of the CP, and also to improve the circularity.
>>But if the feed is just offset a bit (like 1/4-3/4 rather than
>>1/2-1/2)...well that should act similarly to an offset-fed dipole, so
>>you'd have higher input impedance and some feedpoint reactance. And
>>the pattern linearity would be more elliptical (patches typically have
>>relatively high crosspolar response anyway).
>>
>>
>>> Ok, to make sure I understand;
>>> If I put the feed on the lowerhalf of the patch the antenna would be
>>>vertically polarized?
>>>And, if I put the feed on the left or right half of the patch the antenna
>>>would be horizontally polarized?
>>>Now to complicate things, I see some patches split the difference and put
>>>the feedpoint on the left side of the lowerhalf. What does that do?
>>> Thanks, Mike
>>
> My next trick is to put 4 Patch antennas on one plate, I'm looking for the
> proper
> spacing between Patches. My guide at this point is this site,
> http://www.darc.de/distrikte/g/T_ATV/Hybrid-Double-Quad-Array-GB.pdf
> the author puts 4 biquads on one plate with proper phaseing and impedance
> matching.
> The author uses .8 wavelength vertical and .9 wavelength horizontal
> spacing betwen centers.
> I'm thinking 1.0 wavelength between centers is correct, but open to some
> correction factor
> for some (unknown to me) characteristic.
> Any help and leads appreciated,
> Thanks. Mike
>
>

You can space patches quite closely or far apart. It typically depends
on how hard you want to work on your feed network, because closer
spacing increases the mutual coupling, which makes it harder to get the
right phasing. OTOH, spacing them too far apart gives you grating lobes

in the pattern. 1 wavelength is quite far. Consider, for instance, that most patch antennas are on some sort of substrate with an epsilon>1, so the actual patch size is substantially smaller than a free space halfwavelength. If your substrate epsilon were, say, 2.2, then the patch would be roughly 0.5/sqrt(2.2) or about 0.34 lambda(freespace) on a side. At this size, spacing them on half wavelength centers would be easy.

Some other aspects that might drive how you lay out the patch array is how you intend to feed them. If you're feeding them with a microstrip on the edge, then you have to find room for the feedline on the top and the feed network. If you feed them from the bottom (probe feed) it's a bit easier to build your feed network on the back side. You can also slot feed the patches.

395. Re: Patch antenna Polarization?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 02:41:48 UTC
From: mike <amdx@knology.net>
Message-ID: <9abd6$46c11676$18d6b40c$25097@KNOLOGY.NET>
Source record: 37459

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message
news:f9qv78ssj1@nntp1.jpl.nasa.gov...
> amdx wrote:
>> "nx7u" <nx7u@cox.net> wrote in message
>> news:1187044761.504012.257530@i13g2000prf.googlegroups.com...
>>
>>>Yes to both.
>>>A corner-fed patch is roughly circularly polarized...I say roughly
>>>because there are some other pertubations typically made to force the
>>>sense of the CP, and also to improve the circularity.
>>>But if the feed is just offset a bit (like 1/4-3/4 rather than
>>>1/2-1/2)...well that should act similarly to an offset-fed dipole, so
>>>you'd have higher input impedance and some feedpoint reactance. And
>>>the pattern linearity would be more elliptical (patches typically have
>>>relatively high crosspolar response anyway).
>>>
>>>
>>>> Ok, to make sure I understand;
>>>> If I put the feed on the lowerhalf of the patch the antenna would be
>>>>vertically polarized?
>>>>And, if I put the feed on the left or right half of the patch the
>>>>antenna
>>>>would be horizontally polarized?
>>>>Now to complicate things, I see some patches split the difference and
>>>>put
>>>>the feedpoint on the left side of the lowerhalf. What does that do?
>>>> Thanks, Mike
>>>
>> My next trick is to put 4 Patch antennas on one plate, I'm looking for
>> the proper
>> spacing between Patches. My guide at this point is this site,
>> http://www.darc.de/distrikte/g/T_ATV/Hybrid-Double-Quad-Array-GB.pdf
>> the author puts 4 biquads on one plate with proper phaseing and impedance
>> matching.
>> The author uses .8 wavelength vertical and .9 wavelength horizontal
>> spacing betwen centers.
>> I'm thinking 1.0 wavelength between centers is correct, but open to some
>> correction factor
>> for some (unknown to me) characteristic.
>> Any help and leads appreciated,
>> Thanks. Mike
>
> You can space patches quite closely or far apart. It typically depends on
> how hard you want to work on your feed network, because closer spacing

> increases the mutual coupling, which makes it harder to get the right
> phasing. OTOH, spacing them too far apart gives you grating lobes in the
> pattern. 1 wavelength is quite far. Consider, for instance, that most
> patch antennas are on some sort of substrate with an epsilon>1, so the
> actual patch size is substantially smaller than a free space
> halfwavelength. If your substrate epsilon were, say, 2.2, then the patch
> would be roughly 0.5/sqrt(2.2) or about 0.34 lambda(freespace) on a side.
> At this size, spacing them on half wavelength centers would be easy.
>
> Some other aspects that might drive how you lay out the patch array is how
> you intend to feed them. If you're feeding them with a microstrip on the
> edge, then you have to find room for the feedline on the top and the feed
> network. If you feed them from the bottom (probe feed) it's a bit easier
> to build your feed network on the back side. You can also slot feed the
> patches.

The patch I'm building uses an air dielectric so I'm using about .47 Lambda
on a side.
This site is my guide; http://www.rc-cam.com/gp_patch.htm
I'm feeding with coax thru the backplate with the center conductor to the
Patch. (probe feed)
Since the Patches are 0.47 Lambda, 1.0 Lambda spacing would leave 0.56
Lambda between Patches.
Probably to much. At 0.5 Lambda the patches would almost touch. Probably to
close.
So it's between 0.5 and 1.0 Lamda.
What criteria do I use to choose the spacing?
I looked at this page and it shows 0.2, 0.3, 0.4, and 0.5 Lambda
http://images.vertmarkets.com/CRLive/files/downloads/d8b73730-e4b8-42c0-bf2a-ee52b24f02d1/
OrbanArticle5a.pdf
Although for my antenna I think those numbers should be doubled, (0.4, 0.6,
0.8, and 1.0 Lambda.
What criteria do I use to choose the spacing?
Thanks, Mike

396. Cruise Enthusiasts

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 04:18:27 UTC
From: adonis.webmasterlink@gmail.com
Message-ID: <1187065107.908617.45440@q3g2000prf.googlegroups.com>
Source record: 37460

I had been surfing youtube and found a video of a site you should all check out. I mean it is incredible. A youtube for cruise enthusiasts with what seams like 1000's of videos, photos and users al related to ocean lifestyles.

www.splashvision.com and here is the video from youtube.
http://www.youtube.com/watch?v=mhOV01QkaPU

Pretty cool site and very smart.

Well i thought this was a cool find - what you guys think?

Ethan Spencer

397. 2/70 mobile antenna construction details?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 04:26:03 UTC
From: VK3XL <VK3XL.10715aa@radiobanter.com>
Message-ID: <VK3XL.10715aa@radiobanter.com>
Source record: 37465

Hi all, I recently picked up some 5 ft fibre glass antenna blanks complete with the 5/16" base fitted from a hamvention. I thought I might have a go at making a 2/70 cm mobile whip from one of them. I have trawled the net looking for design info or construction plans, but so far nothing has surfaced. Does anyone know of any web sites that may help in this quest. Alternatively are there any magazine articles around that i can look up. My work has an extensive library of amateur radio magazines, but some pointers to which magazine and year would save me a lot of searching.

Many thanks for looking
Mike VK3XL

--
VK3XL

398. Re: What is the BEST ladder line tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 04:42:47 UTC
From: cliff wright <c.c.wright@paradise.net.nz>
Message-ID: <46c132c4@clear.net.nz>
Source record: 37461

Roy Lewallen wrote:
> Danny Richardson wrote:
>
>> . . .
>> Additionally, checking feed line balance by measuring current using
>> RF amp meters of each leg of open line will not accurate due the fact
>> that RF amp meters do not give any phase information. Roy corrected me
>> on that some time ago.
>
>
> The thing to do is run both conductors through a single ferrite core
> (type 43 is fine) -- you can squeeze them together or use a short piece
> of two close spaced two conductor wire. Wind a secondary of 10 turns,
> and terminate the secondary with about 50-100 ohms. Measure the
> secondary voltage with an RF voltmeter (diode, capacitor, and DVM) or
> scope. This directly measures the common mode current. Then compare that
> to the reading you get with only one of the conductors going through the
> core.
>
> Roy Lewallen, W7EL

Hi.
Well after many years (over 50) as a Ham I still reckon the Z match
tuner the best.
In its original form it was designed for 10/80 metres but there is no
reason why you couldn't scale the parts for 160.
It will match from 50 Ohms coax to anything from 20 Ohms to 1500 Ohms
balanced and tune out quite a bit of reactance too. And all this with
only 2 controls.
I have used one with a G5RV 102' doublet for many years and have got WAC
and DXCC with never more than 120 watts.
Other tuners I have tried require hard to get variable inductors and
even then can do some fairly nasty things to your Final if well out of
whack. With the Z match you can calibrate the dials for a particular
antenna and reliably get a reasonable SWR straight off.
The old RSGB amateur radio book has a circuit and it has been published
elsewhere from time to time. I'm sure a Google search will find it OK.
&3's Cliff Wright ZL1BDA ex G3NIA.

399. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 05:56:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <v8f2c3tin751fk9t7fhvvtc2d3gi77qp1i@4ax.com>
Source record: 37462

On Mon, 13 Aug 2007 13:09:09 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>Or, something like a 50k resistor into a 50
>ohm load will be about 60 dB down,

Hi Jim,

Unlikely.

With parasitic capacitance at a meager 1pF across the 50K, its Z at
10MHz would compromise the attenuation presenting closer to 50 dB
down. At 1Ghz it would plunge like a rock. This, of course, presumes
a 1/4 watt resistor.

A better solution is to use surface mount resistors where the
parasitics are down at 100aF - but then you will have a frequency
dependant divider unless you can guarantee that the parasitic
capacitance of the 50 Ohm resistor is 100pF (sort of casts us back
into using a 1/4 watt resistor with a padding cap). At 1GHz, it is
not going to look like a trivial 50K load anymore.

A Pi attenuator will do it better.

73's
Richard Clark, KB7QHC

400. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 06:51:05 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1187074265.579074.106190@g12g2000prg.googlegroups.com>
Source record: 37463

On Aug 13, 1:09 pm, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> K7ITM wrote:
> > On Aug 13, 11:50 am, Jim Lux <james.p....@jpl.nasa.gov> wrote:
>
> >>John Ferrell wrote:
>
> >>>On Thu, 9 Aug 2007 08:13:45 -0400, "Jimmie D"
> >>><GFEN...@carolina.rr.com> wrote:
>
> >>>>I need to measure the loss of aproximately 200ft of coax @ a freq of 1Ghz.
> >>>>The normal procedure for doing this is to inject a signal at one end and
> >>>>measure the power out at the other. Using available test eqipment this is a
> >>>>real pain to do. I propose to disconnect the cable at the top of the tower
> >>>>terminating it in either a short or open and measure the return loss at the
> >>>>source end. I have done this and measured 6.75 db and I am assuming that 1/2
> >>>>of this would be the actual loss of the cable. These numbers do fall within
> >>>>the established norms for this cable. Can you think of a reason thiis method
> >>>>would not be valid?
>
> >>>>Jimmie
>
> >>>This is way too complicated for me!
> >>>My solution would be to build/buy an RF probe and permanently mount it
> >>>at the top of the tower. Bring a pair of wires (Coax if you want it to
> >>>look really professional) down to the bottom and measure it whenever
> >>>or even all the time.
>
> >>Considering he needs sub 1dB accuracy, this is challenging..it would
> >>work if you assume your RF probe never needs calibration and is stable
> >>over the environmental range of interest. Not a trivial thing to do.
>
> >>A diode and a voltmeter certainly won't do it. (A typical diode detector
> >>might vary 1 dB over a 20 degree C range.. judging from the Krytar 700
> >>series data sheet I have sitting here. Granted that's a microwave
> >>detector (100MHz to 40 GHz), but I'd expect similar from most other
> >>diodes. I've given the link to an Agilent Ap note that describes various
> >>detectors in excruciating detail.
>
> >>A diode, voltmeter, and temperature sensor might work, though.
>
> >>useful stuff
athttp://rfdesign.com/mag/608RFDF2.pdfhttp://cp.literature.agilent.com/...
>
> > Seems like modern RF detector ICs offer much better stability than

> > diodes. An AD8302, for example, has a typical +/- 0.25dB variation
> > from -40C to +85C, with a -30dBm signal level.
>
> indeed...
> The temperature
>
> > variation could be calibrated before installation; if necessary, an
> > especially temperature-stable part could be selected from a batch.
> > Then knowing the ambient within 20C would be sufficient. You'd need
> > to arrange sampling at a low level, which could be a well-constructed
> > 90 degree hybrid.
>
> or, even simpler, what about a resistive tap (or a pair of resistive
> taps separated by a short length of transmission line). If you're
> sending, say, 100W (+50dBm) up the wire, and you want, say, -30dBm out,
> you need a 80 dB coupler. Or, something like a 50k resistor into a 50
> ohm load will be about 60 dB down, and you could put a 10-20dB pad in
> before the detector. Calibration would take care of the coupling ratio,
> although, you might want to be careful about the tempco of the resistor.
...

The OP said this is at 1GHz. It's really tough to get a reliable resistive divider at 1GHz, with that sort of ratio. Actually, a capacitive divider probably stands a better chance of working, though getting that really right isn't trivial. (We used to worry about variation in humidity and atmospheric pressure affecting the dielectric constant of air, in using a capacitive sampler...though admittedly that was for work to a level well beyond 1dB accuracy.)

I am rather fond of the coupled-line hybrid idea: it can be built in a way that everything stays ratiometric, so the coupling ratio is very nearly constant over temperature, and of course the directionality lets you observe things you can't just from monitoring voltage at a point. It's possible to build one with low coupling without too much trouble; -60dB coupling isn't out of the question, for sure. I'm imagining a design I could make reliably with simple machine tools that would work well for the OP's application: 100 watts at about 1GHz as I recall in the through line, and coupling on the order of -60dB to get to about -10dBm coupled power and have negligible effect on the through line. There's a free fields solver software package that will accurately predict the coupling, and with the right design and normal machine shop tolerances the coupling and impedance should be accurate to a fraction of a dB and better than a percent, respectively. Perhaps I can run some examples to see if I'm off-base on that, but that's what my mental calculations tell me at the moment.

Cheers,
Tom

401. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 07:14:31 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1187075671.866883.50340@e9g2000prf.googlegroups.com>
Source record: 37464

On Aug 13, 10:56 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Mon, 13 Aug 2007 13:09:09 -0700, Jim Lux <james.p....@jpl.nasa.gov>
> wrote:
>
> >Or, something like a 50k resistor into a 50
> >ohm load will be about 60 dB down,
>
> Hi Jim,
>
> Unlikely.
>
> With parasitic capacitance at a meager 1pF across the 50K, its Z at
> 10MHz would compromise the attenuation presenting closer to 50 dB
> down. At 1Ghz it would plunge like a rock. This, of course, presumes
> a 1/4 watt resistor.
>
> A better solution is to use surface mount resistors where the
> parasitics are down at 100aF - but then you will have a frequency
> dependant divider unless you can guarantee that the parasitic
> capacitance of the 50 Ohm resistor is 100pF (sort of casts us back
> into using a 1/4 watt resistor with a padding cap). At 1GHz, it is
> not going to look like a trivial 50K load anymore.

100aF??? :-) X(100aF)/X(100pF) = 50k/50 ??? ;-) ;-)

402. Re: Can A Patch Ant. be modeled in EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 09:37:45 UTC
From: Wimpie <wimtel@tetech.nl>
Message-ID: <1187084265.202160.247760@r34g2000hsd.googlegroups.com>
Source record: 37466

On 14 ago, 02:11, "amdx" <a...@knology.net> wrote:
> Can a Patch Antenna be modeled in EZNEC?
> Do you make the flat plates with parrallel lines?
> Or is there a function to give you a solid plate?
> Mike

Hello Mike,

As Jim wrote, Patch Antennas are tough with wire-based codes.

In NEC you are limited to Patch Antennas without a dielectric layer, so deformation of the radiation pattern because of radiation from the dielectric will not be shown.

I assume that you start with simulating above a perfect ground. In that case start with grid size of about half the distance between ground and your patch. Use a grid instead of parallel wires. Parallel wires do behave different from a grid when you may expect current flowing perpendicular to the wires (for example close to the feed point).

Use a wire radius of about 20% of the grid size. This results in a wire radius of 10% of the distance between grid and ground. Run your simulations with varying grid size to evaluate the effect of grid size on accuracy.

You may have a look at sonnet lite (www.sonnetusa.com) when you are interested in input impedance and matching only. With sonnet lite you cannot get radiation patterns as far as I know.

I hope this will help you a bit.

Best regards,

Wim
PA3DJS
www.tetech.nl

403. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 11:23:31 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-1408070723310001@jbw-mac.itd.nrl.navy.mil>
Source record: 37467

In article <EgEui.4923$MT3.3995@trnddc05>, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

> I consider "return loss" to be a ratio related to the mismatch of the load
> to the line. A short on the end of a low loss line will have high Return
> Loss. You probably did some math that isnt apparent in the statement "I am
> assuming that 1/2 (of 6.75 dB) is the actual loss". .

Hello, and you don't have to "consider" what return loss is. At an interface/boundary it is the ratio of incident power to reflected power. Mismatch loss is the the ratio of incident power to that dissipated in the load at the interface/boundary. These losses in terms of VSWR are given by

RL (dB) = 20*log(S + 1)/(S-1)

ML (dB) = 10*log(S + 1)^2/(4*S)

where S is the VSWR and logarithms are to base 10.

A lossless transmission line fed at one end and ideally short-circuited on the other end would display a feedpoint impedance that is totally reactive (no resistive component). If a resistive component is present it must be due to dissipative loss in the line and since power has to travel to the load (short) and return to the feedpoint this resistance must be twice the dissipative loss in the line.

The challenge here is, given a transmission line of certain physical length, to find a measurable value at the operating frequency(s). An RF signal source with a surplus (but in proper operating order) General Radio (Genrad) impedance bridge is good for this type of measurement. Keep in mind that any coupling from the line to nearby structures will affect the measurement. Sincerely, and 73s from N4GGO,

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

404. Franklin Antenna (Collinear) for 2.4 GHz with 20.5 dBi of Gain

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 13:38:40 UTC
From: oeguet@gmx.de
Message-ID: <1187098720.581141.323290@57g2000hsv.googlegroups.com>
Source record: 37468

Franklin Antenna (Collinear) for 2.4 GHz with 20.5 dBi of Gain
Impedance: 200 Ohms
VSWR: perfect!

Anyone interested on the design? The impedance have to be adopted via
1:4 lambda/2 balun.
Site containing NEC2-Code and model source code. Also some pictures on
radiation patterns are included. Average Gain Test indicates the
correctness of the model.

Link:
http://mitglied.lycos.de/pp4nec2/files/index.html

Sorry, its in german.

405. What is this???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 13:39:59 UTC
From: TerryinDTW <terryindtw@sbcglobal.net>
Message-ID: <1187098799.338319.322170@q3g2000prf.googlegroups.com>
Source record: 37469

Gentlemen, I ask for your assistance in identifing some mystery
"Boxes" that are popping up
in my neighborhood. I can offer you the following, and there are also
pictures:

There are 2 slightly different models, they vary in where the vent is
located.

All boxes have 3 connections: Power, antenna, and some sort of other
connection - phone, or
perhaps fiber.

No one asked the city communications department or the city attorney
for permission to install
these. They also would like to know what they are.

All have a fan inside that is running.

The devices were manufactured or owned by Nextel. (See pics.)

The antenna looks to be 800 Mhz.

Here are the pics:

www.picasaweb.google.com/terrryindtw/What_is_it

406. Re: What is this???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 13:55:45 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9sc9a$7rv$1@news.albasani.net>
Source record: 37470

TerryinDTW wrote:

> ...
> Here are the pics:
>
> www.picasaweb.google.com/terryindtw/What_is_it
>

There seems to be some problem with that link on this end ...

Regards,
JS

407. Re: What is this???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 14:29:35 UTC
From: mcclements@gmail.com
Message-ID: <1187101775.537535.53270@l70g2000hse.googlegroups.com>
Source record: 37471

Corrected his link for him:

http://picasaweb.google.com/terryindtw/What_is_it

408. Re: What is this???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 14:43:36 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9sf30$e1k$1@news.albasani.net>
Source record: 37472

TerryinDTW wrote:

> ...
> No one asked the city communications department or the city attorney
> for permission to install
> these. They also would like to know what they are.
> ...

Terry:

While I can appreciate the citys' interest in these; why would anyone ever have to get the cities permission? If the device meet/exceeds FCC specs and "they" obtained the power companies to use their (our) pole for mounting, it should be out of the cites authority.

Perhaps a call to the power company who maintains the pole would develop some information?

I have no idea of what this device is; a guess would be the best I could venture. However, my interest, most likely, meets or exceeds the cites ...

Regards,
JS

409. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 15:44:00 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9sik1$1dt$1@nntp1.jpl.nasa.gov>
Source record: 37475

Richard Clark wrote:
> On Mon, 13 Aug 2007 13:09:09 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
> wrote:
>
>
>>Or, something like a 50k resistor into a 50
>>ohm load will be about 60 dB down,
>
>
> Hi Jim,
>
> Unlikely.
>
> With parasitic capacitance at a meager 1pF across the 50K, its Z at
> 10MHz would compromise the attenuation presenting closer to 50 dB
> down. At 1Ghz it would plunge like a rock. This, of course, presumes
> a 1/4 watt resistor.
>
> A better solution is to use surface mount resistors where the
> parasitics are down at 100aF - but then you will have a frequency
> dependant divider unless you can guarantee that the parasitic
> capacitance of the 50 Ohm resistor is 100pF (sort of casts us back
> into using a 1/4 watt resistor with a padding cap). At 1GHz, it is
> not going to look like a trivial 50K load anymore.
>
> A Pi attenuator will do it better.

A resistive 30dB tap into a 30 dB pi attenuator, or something like that?
That would get the resistor in the tap down to a reasonable value..
and, as you point out, at 1 GHz layout and component selection would be
critical.

I suppose if you're building a circuit board, a small parallel line
coupler would work just as well, and probably be easier.

in any case, the use of those nifty parts from AD does open up a lot of
interesting applications.

>
> 73's
> Richard Clark, KB7QHC

410. Re: What is this???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 15:45:33 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <kYmdndk5AueFU1zbnZ2dnUVZ_jadnZ2d@comcast.com>
Source record: 37473

<mcclements@gmail.com> wrote in message
news:1187101775.537535.53270@l70g2000hse.googlegroups.com...
> Corrected his link for him:
>
> http://picasaweb.google.com/terryindtw/What_is_it
>
>
It is probably a new style CABLE distribution/line amplifier.
73's
Howard W3CQH

411. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 15:45:58 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9sinm$1dt$2@nntp1.jpl.nasa.gov>
Source record: 37476

>
> I am rather fond of the coupled-line hybrid idea: it can be built in
> a way that everything stays ratiometric, so the coupling ratio is very
> nearly constant over temperature, and of course the directionality
> lets you observe things you can't just from monitoring voltage at a
> point. It's possible to build one with low coupling without too much
> trouble; -60dB coupling isn't out of the question, for sure. I'm
> imagining a design I could make reliably with simple machine tools
> that would work well for the OP's application: 100 watts at about
> 1GHz as I recall in the through line, and coupling on the order of
> -60dB to get to about -10dBm coupled power and have negligible effect
> on the through line. There's a free fields solver software package
> that will accurately predict the coupling, and with the right design
> and normal machine shop tolerances the coupling and impedance should
> be accurate to a fraction of a dB and better than a percent,
> respectively. Perhaps I can run some examples to see if I'm off-base
> on that, but that's what my mental calculations tell me at the moment.

Actually, the exact coupling ratio probably isn't important in this
application, because it could be "calibrated out". Stability would be a
bigger concern, and it's certainly possible to design a coupler that is
very temperature stable by choosing the right dimensions so that things
change in the right ratios.

412. Re: Cruise Enthusiasts

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 15:47:24 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <Bc6dnUrm-KoaU1zbnZ2dnUVZ_hGdnZ2d@comcast.com>
Source record: 37474

<adonis.webmasterlink@gmail.com> wrote in message
news:1187065107.908617.45440@q3g2000prf.googlegroups.com...
>I had been surfing youtube and found a video of a site you should all
> check out. I mean it is incredible. A youtube for cruise enthusiasts
> with what seams like 1000's of videos, photos and users al related to
> ocean lifestyles.
>
> www.splashvision.com and here is the video from youtube.
> http://www.youtube.com/watch?v=mhOV01QkaPU
>
> Pretty cool site and very smart.
>
> Well i thought this was a cool find - what you guys think?
>
> Ethan Spencer
>
This is not the group to post this kind of message to!

413. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 15:48:42 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9sisq$1dt$3@nntp1.jpl.nasa.gov>
Source record: 37477

J. B. Wood wrote:

> The challenge here is, given a transmission line of certain physical
> length, to find a measurable value at the operating frequency(s). An RF
> signal source with a surplus (but in proper operating order) General Radio
> (Genrad) impedance bridge is good for this type of measurement. Keep in
> mind that any coupling from the line to nearby structures will affect the
> measurement. Sincerely, and 73s from N4GGO,

Even more of a challenge might be getting that impedance bridge to work
at 1 GHz...<grin>

414. Re: Patch antenna Polarization?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 15:53:24 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9sj5l$1n2$1@nntp1.jpl.nasa.gov>
Source record: 37478

>
> The patch I'm building uses an air dielectric so I'm using about .47 Lambda
> on a side.
> This site is my guide; http://www.rc-cam.com/gp_patch.htm
> I'm feeding with coax thru the backplate with the center conductor to the
> Patch. (probe feed)
> Since the Patches are 0.47 Lambda, 1.0 Lambda spacing would leave 0.56
> Lambda between Patches.
> Probably to much. At 0.5 Lambda the patches would almost touch. Probably to
> close.
> So it's between 0.5 and 1.0 Lamda.
> What criteria do I use to choose the spacing?

Are you concerned about grating lobes?
How much work do you want to go through to calculate or measure mutual
Z, so your feed network works?

Far apart reduces mutual coupling, so you can use a simple feed network
(i.e. power divider and equal length lines), but gives you grating lobes.

You have to calculate the pattern of your array (you could start with
the pattern of an array of isotropic elements, and then just multiply by
the pattern of one patch, which is typically some sort of cos(theta)^n
looking thing..

If far apart gives you an ok pattern, then go with it. It's easier,
although bulkier.

> I looked at this page and it shows 0.2, 0.3, 0.4, and 0.5 Lambda
> http://images.vertmarkets.com/CRLive/files/downloads/d8b73730-e4b8-42c0-bf2a-ee52b24f02d
1/OrbanArticle5a.pdf
> Although for my antenna I think those numbers should be doubled, (0.4, 0.6,
> 0.8, and 1.0 Lambda.
> What criteria do I use to choose the spacing?
> Thanks, Mike
>
>
>
>
>
>

415. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 16:03:07 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jek3c3530599mead0vjsenmlqlofvp4m79@4ax.com>
Source record: 37479

On Tue, 14 Aug 2007 00:14:31 -0700, K7ITM <k7itm@msn.com> wrote:

>On Aug 13, 10:56 pm, Richard Clark <kb7...@comcast.net> wrote:
>> On Mon, 13 Aug 2007 13:09:09 -0700, Jim Lux <james.p....@jpl.nasa.gov>
>> wrote:
>>
>> >Or, something like a 50k resistor into a 50
>> >ohm load will be about 60 dB down,
>>
>> Hi Jim,
>>
>> Unlikely.
>>
>> With parasitic capacitance at a meager 1pF across the 50K, its Z at
>> 10MHz would compromise the attenuation presenting closer to 50 dB
>> down. At 1Ghz it would plunge like a rock. This, of course, presumes
>> a 1/4 watt resistor.
>>
>> A better solution is to use surface mount resistors where the
>> parasitics are down at 100aF - but then you will have a frequency
>> dependant divider unless you can guarantee that the parasitic
>> capacitance of the 50 Ohm resistor is 100pF (sort of casts us back
>> into using a 1/4 watt resistor with a padding cap). At 1GHz, it is
>> not going to look like a trivial 50K load anymore.
>
>100aF??? :-) X(100aF)/X(100pF) = 50k/50 ??? ;-) ;-)

S/B 100fF (trying to watch the Perseids and do math at the same
time).

416. Re: What is this???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 16:26:57 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns998C605BF9E61spectrumhogstarbandn@198.186.192.196>
Source record: 37480

>>
>> http://picasaweb.google.com/terryindtw/What_is_it
>>
>>
> It is probably a new style CABLE distribution/line amplifier.
> 73's
> Howard W3CQH
>
>

Normal cable distribution/line amplifiers don't need antennas.

Ed

417. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 16:53:31 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1187110411.699125.210300@k79g2000hse.googlegroups.com>
Source record: 37481

On Aug 14, 8:45 am, Jim Lux <james.p....@jpl.nasa.gov> wrote:
> > I am rather fond of the coupled-line hybrid idea: it can be built in
> > a way that everything stays ratiometric, so the coupling ratio is very
> > nearly constant over temperature, and of course the directionality
> > lets you observe things you can't just from monitoring voltage at a
> > point. It's possible to build one with low coupling without too much
> > trouble; -60dB coupling isn't out of the question, for sure. I'm
> > imagining a design I could make reliably with simple machine tools
> > that would work well for the OP's application: 100 watts at about
> > 1GHz as I recall in the through line, and coupling on the order of
> > -60dB to get to about -10dBm coupled power and have negligible effect
> > on the through line. There's a free fields solver software package
> > that will accurately predict the coupling, and with the right design
> > and normal machine shop tolerances the coupling and impedance should
> > be accurate to a fraction of a dB and better than a percent,
> > respectively. Perhaps I can run some examples to see if I'm off-base
> > on that, but that's what my mental calculations tell me at the moment.
>
> Actually, the exact coupling ratio probably isn't important in this
> application, because it could be "calibrated out". Stability would be a
> bigger concern, and it's certainly possible to design a coupler that is
> very temperature stable by choosing the right dimensions so that things
> change in the right ratios.

Bingo. It's that ratiometric thing that is a big plus for stability.
In a coupler made of all the same metal, or at least metals that have
nearly equal coefficients of expansion, the ratios stay the same, and
it's the dimensional ratios that establish the coupling and
impedances, not the absolute size. Actually, the change in length
does matter, but if you make the assembly a quarter wave long, the
d(coupling)/d(length) is zero at that point anyway. In any event, I
suppose the thermal coefficient of expansion of metals you'd be most
likely to use is small enough that you'd be fine with a shorter
coupler. There doesn't need to be anything terribly complex about the
geometry of the whole thing, either. It's probably safe to say that
changes in the dielectric constant of air due to air pressure and
humidity aren't going to be significant in this case. ;-)

Cheers,
Tom

418. Re: What is this???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 18:13:55 UTC
From: dplatt@radagast.org
Message-ID: <3089p4-tvs.ln1@radagast.org>
Source record: 37332

In article <kYmdndk5AueFU1zbnZ2dnUVZ_jadnZ2d@comcast.com>,
John Doe <hgorden@adelphia.net> wrote:

>It is probably a new style CABLE distribution/line amplifier.
>73's

Given that Nextel is involved, and that they're a cellphone provider
which makes extensive use of 800 MHz spectrum, I would guess that
these are "micro-cell" base stations. These are small-footprint
cellphone bases which are used to improve cellphone connectivity in
areas where the signals from the larger cellphone towers can't reach
(due e.g. to topography, or lack of ability to find a location to put
a good tower), or to provide connectivity into the insides of buildings.

Googling around a bit indicates that Alcatel-Lucent has just recently
announced a new generation of these... their CDMA Base Station 2400.
I have no idea of that's the specific model shown in these pictures.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

419. Re: What is this???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 18:30:26 UTC
From: Ed <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns998C754C6E448spectrumhogstarbandn@198.186.192.196>
Source record: 37333

> Given that Nextel is involved, and that they're a cellphone provider
> which makes extensive use of 800 MHz spectrum, I would guess that
> these are "micro-cell" base stations. These are small-footprint
> cellphone bases which are used to improve cellphone connectivity in
> areas where the signals from the larger cellphone towers can't reach
> (due e.g. to topography, or lack of ability to find a location to put
> a good tower), or to provide connectivity into the insides of buildings.
>
> Googling around a bit indicates that Alcatel-Lucent has just recently
> announced a new generation of these... their CDMA Base Station 2400.
> I have no idea of that's the specific model shown in these pictures.
>

I agree with Dave. In retrospect, those boxes do look a lot like a
miniature version of the remote "repeater" type cellular stations that the
cell-site operators use. Also, that antenna does look like standard
moderate gain 800MHz antennas.

Ed K7AAT

420. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 19:01:32 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <seu3c3pffh1fv1plkgj9in4agd3fk59lj7@4ax.com>
Source record: 37334

On Tue, 14 Aug 2007 09:53:31 -0700, K7ITM <k7itm@msn.com> wrote:

>Bingo. It's that ratiometric thing that is a big plus for stability.
>In a coupler made of all the same metal, or at least metals that have
>nearly equal coefficients of expansion, the ratios stay the same, and
>it's the dimensional ratios that establish the coupling and
>impedances, not the absolute size. Actually, the change in length
>does matter, but if you make the assembly a quarter wave long, the
>d(coupling)/d(length) is zero at that point anyway. In any event, I
>suppose the thermal coefficient of expansion of metals you'd be most
>likely to use is small enough that you'd be fine with a shorter
>coupler. There doesn't need to be anything terribly complex about the
>geometry of the whole thing, either. It's probably safe to say that
>changes in the dielectric constant of air due to air pressure and
>humidity aren't going to be significant in this case. ;-)
>
>Cheers,
>Tom
Tom, I thought this thread concerned measurement of attenuation in transmission lines. On the 11th I posted a
precedure that involves measuring the line input impedances with the line terminated in both a short circuit
and an open circuit, then plugging the measured data into a BASIC program that outputs the attenuation,
complex Zo, and electrical length. My thoughts were that this procedure gives results with more accuracy and
precision than the procedures discussed before my post appeared.

However, I noticed that my post drew zero response. Is my procedure out-of-line, or out dated?

Walt, W2DU

421. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 19:06:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <u5v3c35q18rc93urmlhoibknbmlc9ojudk@4ax.com>
Source record: 37335

On Tue, 14 Aug 2007 15:01:32 -0400, Walter Maxwell <walt@w2du.com>
wrote:

> My thoughts were that this procedure gives results with more accuracy and
>precision than the procedures discussed before my post appeared.
>
>However, I noticed that my post drew zero response. Is my procedure out-of-line, or out
dated?

Hi Walt,

I provided a posting on how to determine the extent of error that was
similarly ignored - don't feel bad. Accuracy isn't all that its
cracked up to be. :-)

73's
Richard Clark, KB7QHC

422. Re: Can A Patch Ant. be modeled in EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 19:08:16 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13c3vd4bitjhn51@corp.supernews.com>
Source record: 37336

amdx wrote:
> Can a Patch Antenna be modeled in EZNEC?

Only if there's no dielectric between the patch and ground plane. This configuration is uncommon. There's no way for EZNEC or other NEC-based program to account for the dielectric normally used.

> Do you make the flat plates with parrallel lines?

Normally you would use a wire grid. The method is described in the manual.

> Or is there a function to give you a solid plate?

No.

Roy Lewallen, W7EL

423. Re: Can A Patch Ant. be modeled in EZNEC?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 19:19:01 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <f9sv75$846$1@nntp1.jpl.nasa.gov>
Source record: 37338

Roy Lewallen wrote:
> amdx wrote:
>
>> Can a Patch Antenna be modeled in EZNEC?
>
>
> Only if there's no dielectric between the patch and ground plane. This
> configuration is uncommon. There's no way for EZNEC or other NEC-based
> program to account for the dielectric normally used.

I haven't tried it, and it might have horrible other side effects, but
one might be able to use NEC4, and bury the ground plane slightly below
the surface, setting the soil properties to the dielectric properties.

Or, use insulated wires...

424. Re: Patch antenna Polarization?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 19:58:46 UTC
From: mike <amdx@knology.net>
Message-ID: <ed6f5$46c2097b$45013910$10904@KNOLOGY.NET>
Source record: 37337

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message
news:f9sj5l$1n2$1@nntp1.jpl.nasa.gov...
>
>>
>> The patch I'm building uses an air dielectric so I'm using about .47
>> Lambda on a side.
>> This site is my guide; http://www.rc-cam.com/gp_patch.htm
>> I'm feeding with coax thru the backplate with the center conductor to the
>> Patch. (probe feed)
>> Since the Patches are 0.47 Lambda, 1.0 Lambda spacing would leave 0.56
>> Lambda between Patches.
>> Probably to much. At 0.5 Lambda the patches would almost touch. Probably
>> to close.
>> So it's between 0.5 and 1.0 Lamda.
>> What criteria do I use to choose the spacing?
>
> Are you concerned about grating lobes?

Just looking for the main lobe to have max gain.

> How much work do you want to go through to calculate or measure mutual Z,
> so your feed network works?

I hope my 50 ohm patches stays 50 ohms, so I guess I they need enough space
so
they don't have much mutual coupling. (I want my cake and eat it to) :-)

>
> Far apart reduces mutual coupling, so you can use a simple feed network
> (i.e. power divider and equal length lines), but gives you grating lobes.
>
> You have to calculate the pattern of your array (you could start with the
> pattern of an array of isotropic elements, and then just multiply by the
> pattern of one patch, which is typically some sort of cos(theta)^n looking
> thing..
>
> If far apart gives you an ok pattern, then go with it. It's easier,
> although bulkier.
>

I'm quite confused at this point, I'm going to build one using the spacing
at
http://www.darc.de/distrikte/g/T_ATV/Hybrid-Double-Quad-Array-GB.pdf
But instead of the Biquad antennas, I'll use the Patches.
I'll build it and see if the come, (the RF waves that is)
Do you think 0.45 Lambda is far enough so that mutual couple won't affect

the input impedance?

Mike

425. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 20:17:18 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1187122638.632769.280250@k79g2000hse.googlegroups.com>
Source record: 37339

On Aug 14, 12:01 pm, Walter Maxwell <w...@w2du.com> wrote:
> On Tue, 14 Aug 2007 09:53:31 -0700, K7ITM <k7...@msn.com> wrote:
> >Bingo. It's that ratiometric thing that is a big plus for stability.
> >In a coupler made of all the same metal, or at least metals that have
> >nearly equal coefficients of expansion, the ratios stay the same, and
> >it's the dimensional ratios that establish the coupling and
> >impedances, not the absolute size. Actually, the change in length
> >does matter, but if you make the assembly a quarter wave long, the
> >d(coupling)/d(length) is zero at that point anyway. In any event, I
> >suppose the thermal coefficient of expansion of metals you'd be most
> >likely to use is small enough that you'd be fine with a shorter
> >coupler. There doesn't need to be anything terribly complex about the
> >geometry of the whole thing, either. It's probably safe to say that
> >changes in the dielectric constant of air due to air pressure and
> >humidity aren't going to be significant in this case. ;-)
>
> >Cheers,
> >Tom
>
> Tom, I thought this thread concerned measurement of attenuation in transmission lines. On
the 11th I posted a
> precedure that involves measuring the line input impedances with the line terminated in
both a short circuit
> and an open circuit, then plugging the measured data into a BASIC program that outputs
the attenuation,
> complex Zo, and electrical length. My thoughts were that this procedure gives results
with more accuracy and
> precision than the procedures discussed before my post appeared.
>
> However, I noticed that my post drew zero response. Is my procedure out-of-line, or out
dated?
>
> Walt, W2DU

Hi Walt,

Well, yes, the original posting asked if it was reasonable to check
the line attenuation with the other end of the line open and/or
shorted. I think that part of it got hashed out pretty well early on,
before your posting. If I'm not mistaken the OP has a VNA he can use
to do the measurement. By sweeping over a narrow frequency range
(about 200 feet of line; he's interested in the loss at about 1GHz),
he can easily and very quickly see the line impedance and the return
loss. If he's worried about his VNA calibration, I suggested he get a
couple calibrated attenuators that bracket the return loss of his

line, which he has to check occasionally. We just don't ever see much change in attenuators from reliable vendors, from one check to the next.

Beyond that, we got into some "basenote drift" along the lines of "how can you provide reasonably cheaply a way to continuously monitor the performance?" That's where the stuff about putting something up the tower to pick off an RF sample came in. Since your posting appears as a response to one of mine where I was writing about the top-end monitoring, that may be an additional reason it didn't generate any responses. On the top-end monitoring, I claim that it's not all that difficult to make a stable coupled-line hybrid with very low coupling, and combine that with one of the modern RF power monitoring chips (esp. the AD8302 which has good temperature stability, and can tell you the phase relationship and amplitudes of two signals) to look at either just incident nom. 100 watts of power, or both incident and reflected. With something like that in place, you'd have added peace of mind on a continuous basis that everything was behaving as it's supposed to. It's reasonable to ask if there's much benefit beyond just monitoring the forward power at both ends of the line, but it seems like a small incremental effort to add a reflected measurement if you're doing a forward one. Of course, even continuous monitoring of the forward power at the top end may be well beyond what the OP has in mind.

Cheers,
Tom

426. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 21:10:09 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <lNWdnehoWOrKtV_b4p2dnAA@pipex.net>
Source record: 37342

> Hello, and I must have had a senior moment. Forgot what freq the OP was
> interested in. Too many years spent making measurements in the 2-30 MHz
> band I guess ;-) Of course now we're looking at a vector network analyzer
> to make the measurement (not something most Hams have in the shack). I
> wonder if MFJ has anything?
==========
The MFJ259 antenna analyser can measure coax loss at any frequency
between 1.8 and 170 MHz.

Frank GM0CSZ / KN6WH

427. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 21:22:59 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-1408071722590001@jbw-mac.itd.nrl.navy.mil>
Source record: 37340

In article <f9sisq$1dt$3@nntp1.jpl.nasa.gov>, james.p.lux@jpl.nasa.gov wrote:

> J. B. Wood wrote:
>
> > The challenge here is, given a transmission line of certain physical
> > length, to find a measurable value at the operating frequency(s). An RF
> > signal source with a surplus (but in proper operating order) General Radio
> > (Genrad) impedance bridge is good for this type of measurement. Keep in
> > mind that any coupling from the line to nearby structures will affect the
> > measurement. Sincerely, and 73s from N4GGO,
>
> Even more of a challenge might be getting that impedance bridge to work
> at 1 GHz...<grin>

Hello, and I must have had a senior moment. Forgot what freq the OP was interested in. Too many years spent making measurements in the 2-30 MHz band I guess ;-) Of course now we're looking at a vector network analyzer to make the measurement (not something most Hams have in the shack). I wonder if MFJ has anything? Sincerely,

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

428. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 21:41:43 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <f9t7j6$c86$1@news.albasani.net>
Source record: 37341

Jimmie D wrote:

Own, beg, borrow or steal a watt meter. Hook to back of rig, measure
wattage, hookup rig through coax to watt meter, measure wattage--no
conversion math/chart necessary. You'll directly know the loss ...

Regards,
JS

429. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-14 22:41:23 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1187131283.834214.59540@r34g2000hsd.googlegroups.com>
Source record: 37343

On Aug 14, 2:22 pm, w...@itd.nrl.navy.mil (J. B. Wood) wrote:
> In article <f9sisq$1d...@nntp1.jpl.nasa.gov>, james.p....@jpl.nasa.gov wrote:
> > J. B. Wood wrote:
>
> > > The challenge here is, given a transmission line of certain physical
> > > length, to find a measurable value at the operating frequency(s). An RF
> > > signal source with a surplus (but in proper operating order) General Radio
> > > (Genrad) impedance bridge is good for this type of measurement. Keep in
> > > mind that any coupling from the line to nearby structures will affect the
> > > measurement. Sincerely, and 73s from N4GGO,
>
> > Even more of a challenge might be getting that impedance bridge to work
> > at 1 GHz...<grin>
>
> Hello, and I must have had a senior moment. Forgot what freq the OP was
> interested in. Too many years spent making measurements in the 2-30 MHz
> band I guess ;-) Of course now we're looking at a vector network analyzer
> to make the measurement (not something most Hams have in the shack). I
> wonder if MFJ has anything? Sincerely,
>
> John Wood (Code 5550) e-mail: w...@itd.nrl.navy.mil
> Naval Research Laboratory
> 4555 Overlook Avenue, SW
> Washington, DC 20375-5337

Later on in the thread, the OP said he has an Agilent network analyzer, presumably a VNA, and an HP power meter. Certainly the VNA, connected to the feed end with the tower end open or shorted, swept over a fairly narrow range (since he has 200 feet of line) around 1GHz, should tell him enough to characterize the impedance and the loss. He indicated that he's happy with that solution, some time back in the thread.

Cheers,
Tom

430. Re: What is this???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 00:26:58 UTC
From: Dan Yemiola AI8O <WinstonSalemVE@Yahoo.Com>
Message-ID: <f9thf8$1l6$1@news04.infoave.net>
Source record: 37344

I don't know about the other objects, but in picture #9, the oval object is
a "turning web".
They are used when you have to reverse the direction of a cable, but keep it
on the same line.
The radius of the web is larger than the minimum radius the cable can
handle.
It keeps the wires inside the cable from flexing too much and breaking as
the cables direction changes.
This may or may not be a part of the "mystery box". It is probably part of
the local Telco physical plant.

"TerryinDTW" <terryindtw@sbcglobal.net> wrote in message
news:1187098799.338319.322170@q3g2000prf.googlegroups.com...
> Gentlemen, I ask for your assistance in identifing some mystery
> "Boxes" that are popping up
> in my neighborhood. I can offer you the following, and there are also
> pictures:
>
> There are 2 slightly different models, they vary in where the vent is
> located.
>
> All boxes have 3 connections: Power, antenna, and some sort of other
> connection - phone, or
> perhaps fiber.
>
> No one asked the city communications department or the city attorney
> for permission to install
> these. They also would like to know what they are.
>
> All have a fan inside that is running.
>
> The devices were manufactured or owned by Nextel. (See pics.)
>
> The antenna looks to be 800 Mhz.
>
> Here are the pics:
>
> www.picasaweb.google.com/terrryindtw/What_is_it
>

431. Re: Franklin Antenna (Collinear) for 2.4 GHz with 20.5 dBi of Gain

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 00:48:56 UTC
From: mike <amdx@knology.net>
Message-ID: <af614$46c24d80$18d6b40c$28853@KNOLOGY.NET>
Source record: 37345

<oeguet@gmx.de> wrote in message
news:1187098720.581141.323290@57g2000hsv.googlegroups.com...
> Franklin Antenna (Collinear) for 2.4 GHz with 20.5 dBi of Gain
> Impedance: 200 Ohms
> VSWR: perfect!
>
> Anyone interested on the design? The impedance have to be adopted via
> 1:4 lambda/2 balun.
> Site containing NEC2-Code and model source code. Also some pictures on
> radiation patterns are included. Average Gain Test indicates the
> correctness of the model.
>
> Link:
> http://mitglied.lycos.de/pp4nec2/files/index.html
>
> Sorry, its in german.
>
Here's a similar style antenna written in English. This antenna is shorter,
has less gain, but does show matching section.
Mike

shows matching

432. Re: What is this???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 00:53:52 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13c4jl13u1u0l12@corp.supernews.com>
Source record: 37346

Thanks for telling what the oval objects are. I have seen them and often wondered just what they are or what they were for.

"Dan Yemiola AI8O" <WinstonSalemVE@Yahoo.Com> wrote in message news:f9thf8$1l6$1@news04.infoave.net...
>I don't know about the other objects, but in picture #9, the oval object is
>a "turning web".
> They are used when you have to reverse the direction of a cable, but keep
> it on the same line.
> The radius of the web is larger than the minimum radius the cable can
> handle.
> It keeps the wires inside the cable from flexing too much and breaking as
> the cables direction changes.
> This may or may not be a part of the "mystery box". It is probably part of
> the local Telco physical plant.
>
> "TerryinDTW" <terryindtw@sbcglobal.net> wrote in message
> news:1187098799.338319.322170@q3g2000prf.googlegroups.com...
>> Gentlemen, I ask for your assistance in identifing some mystery
>> "Boxes" that are popping up
>> in my neighborhood. I can offer you the following, and there are also
>> pictures:
>>
>> There are 2 slightly different models, they vary in where the vent is
>> located.
>>
>> All boxes have 3 connections: Power, antenna, and some sort of other
>> connection - phone, or
>> perhaps fiber.
>>
>> No one asked the city communications department or the city attorney
>> for permission to install
>> these. They also would like to know what they are.
>>
>> All have a fan inside that is running.
>>
>> The devices were manufactured or owned by Nextel. (See pics.)
>>
>> The antenna looks to be 800 Mhz.
>>
>> Here are the pics:
>>
>> www.picasaweb.google.com/terrryindtw/What_is_it
>>

>
>

433. Re: measuring cable loss

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 01:40:20 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46c25983$0$18928$4c368faf@roadrunner.com>
Source record: 37347

"K7ITM" <k7itm@msn.com> wrote in message
news:1187122638.632769.280250@k79g2000hse.googlegroups.com...
> On Aug 14, 12:01 pm, Walter Maxwell <w...@w2du.com> wrote:
>> On Tue, 14 Aug 2007 09:53:31 -0700, K7ITM <k7...@msn.com> wrote:
>> >Bingo. It's that ratiometric thing that is a big plus for stability.
>> >In a coupler made of all the same metal, or at least metals that have
>> >nearly equal coefficients of expansion, the ratios stay the same, and
>> >it's the dimensional ratios that establish the coupling and
>> >impedances, not the absolute size. Actually, the change in length
>> >does matter, but if you make the assembly a quarter wave long, the
>> >d(coupling)/d(length) is zero at that point anyway. In any event, I
>> >suppose the thermal coefficient of expansion of metals you'd be most
>> >likely to use is small enough that you'd be fine with a shorter
>> >coupler. There doesn't need to be anything terribly complex about the
>> >geometry of the whole thing, either. It's probably safe to say that
>> >changes in the dielectric constant of air due to air pressure and
>> >humidity aren't going to be significant in this case. ;-)
>>
>> >Cheers,
>> >Tom
>>
>> Tom, I thought this thread concerned measurement of attenuation in
>> transmission lines. On the 11th I posted a
>> precedure that involves measuring the line input impedances with the line
>> terminated in both a short circuit
>> and an open circuit, then plugging the measured data into a BASIC program
>> that outputs the attenuation,
>> complex Zo, and electrical length. My thoughts were that this procedure
>> gives results with more accuracy and
>> precision than the procedures discussed before my post appeared.
>>
>> However, I noticed that my post drew zero response. Is my procedure
>> out-of-line, or out dated?
>>
>> Walt, W2DU
>
> Hi Walt,
>
> Well, yes, the original posting asked if it was reasonable to check
> the line attenuation with the other end of the line open and/or
> shorted. I think that part of it got hashed out pretty well early on,
> before your posting. If I'm not mistaken the OP has a VNA he can use
> to do the measurement. By sweeping over a narrow frequency range
> (about 200 feet of line; he's interested in the loss at about 1GHz),

> he can easily and very quickly see the line impedance and the return
> loss. If he's worried about his VNA calibration, I suggested he get a
> couple calibrated attenuators that bracket the return loss of his
> line, which he has to check occasionally. We just don't ever see much
> change in attenuators from reliable vendors, from one check to the
> next.
>
> Beyond that, we got into some "basenote drift" along the lines of "how
> can you provide reasonably cheaply a way to continuously monitor the
> performance?" That's where the stuff about putting something up the
> tower to pick off an RF sample came in. Since your posting appears as
> a response to one of mine where I was writing about the top-end
> monitoring, that may be an additional reason it didn't generate any
> responses. On the top-end monitoring, I claim that it's not all that
> difficult to make a stable coupled-line hybrid with very low coupling,
> and combine that with one of the modern RF power monitoring chips
> (esp. the AD8302 which has good temperature stability, and can tell
> you the phase relationship and amplitudes of two signals) to look at
> either just incident nom. 100 watts of power, or both incident and
> reflected. With something like that in place, you'd have added peace
> of mind on a continuous basis that everything was behaving as it's
> supposed to. It's reasonable to ask if there's much benefit beyond
> just monitoring the forward power at both ends of the line, but it
> seems like a small incremental effort to add a reflected measurement
> if you're doing a forward one. Of course, even continuous monitoring
> of the forward power at the top end may be well beyond what the OP has
> in mind.
>
> Cheers,
> Tom
>

Having a power sensor at the top of the tower would mean that it would have to be calibrated at least annually. This would be deafeating the purpose of the investigation. The purpose being finding an easier method with acceptable accuracy of measuring the loss of the cable. Initial test taken by the enginnering staff show that this may be feasble and possibly even moe accurate than using the current appoved method.

Jimmie

434. Re: Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 02:31:58 UTC
From: "Roger (K8RI)" <validaddress@my.com>
Message-ID: <a4n4c35n30q8ig7jo2l344lhkusca4qgq2@4ax.com>
Source record: 37348

On Sat, 11 Aug 2007 15:04:05 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>
>What do you all think of using heavy duty nylon rope instead of wire for
>guys?

I use it in areas where the stretching and elasticity is not a problem
such as guying to the middle of my AV640 vertical which is on top of a
40 foot tower. I put them up knowing they will stretch a *LOT* and
have to be re tightened several times in the first couple of weeks.
>
>I have a Rohn 25G up 50 feet with a 2M/220/440 vertical on a 10-foot mast
>on top of the tower. It is guyed at 30 feet with standard steel guy wire.

"Standard steel guy wire" is a pretty broad statement, but without a
whole lot of information. Steel guys vary from soft steel to the
Extra High Strength (EHS) that ROHN recommends. The steel guy wire
sold by Radio Shack can be pulled in two with just two men pulling.
I've done it. Galvanized wire rope is much better and easier to work
with, but it still has less strength than EHS or Phillystran.

>I was just up the top of it two days ago installing the vertical, and it
>seems rock solid.

I would not use Nylon rope on a tower as it would allow too much
flexing should you get a strong wind before the rope has aged and
finally taken a set. Nylon is not UV proof, but it will last a few
years.

You essentially have a 60' system and ROHN recommends two level guying
using 3/16" EHS steel tensioned to 400#. That means it's probably
4000# working strength or the same as HPTG40001 Phillystran

Even going to the 50' tower they still say guying at two levels with
3/16" EHS at 23 and 45 feet. With the array on top of a 10' mast I'd
put the top set one foot below the top of the tower and the other at
roughly 27 or 28 feet.

Why not use Phillystran (http://www.texastowers.com/philly.htm). I
use it on a 100' ROHN 45G with a very large array on top.
You could use the HPTG12001 which is 1200# test at 45 cents per foot,
or the HPTG21001 which is 2100# test at 59 cents a foot. IF the
loading is light and you don't live in a high wind area.
Don't forget to tension the guys at 10% of their working load.

http://www.rogerhalstead.com/ham_files/Tower29.htm
The tower is guyed at three levels using Phyllistran HPTG40001 @ 4000#
test at 32 and 68 feet and HPTG67001 @ 6700# test at 97 feet.(IIRC)
http://www.rogerhalstead.com/ham_files/Tower30.htm The bottom set of
guys is almost impossible to see.

Note the bend in the AV640 due to the strong winds when the photo was
taken. The Nylon guys are in place. It had only been up a month or
so. That tower has since gone through a game of "musical sections"
with the top and base sections being replaced and a straight section
added above the base section to make 40 feet.

>
>Now my next project is to put up a 3-element tribander, and while my guess
>is it'll probably be OK without any additional guying, the paranoid in me
>says "hey, bozo... put up another set of guys!".

A lot depends on the current installation, but you have the VHF/UHF
array at 60 feet. Being 10 feet above the top of the tower that is
quite a bending moment although to do that I'd assume you have the
rotator down inside the tower.

>
>I'm wondering if heavy duty nylon rope will be sufficient. It'll sure be
>easier to work with, and there won't be the issue of having to break up
>the guys every so often to keep them from resonating.
>
>There is a ham on the other side of town that has FOUR (4) Rohn 25G's up
>120 feet each, arranged in a square, and fed with a phasing network as
>phased verticals for 80 meters. Each of the four towers is guyed in two
>or three places with polypropylene rope. Been up a long time and seems
>OK. But, there isn't a tribander and rotator on top.
>
>
>

435. VSWR Meter and reactance

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 12:09:40 UTC
From: amdx <amdx@knology.net>
Message-ID: <a4b17$46c2ecfc$18d6b40c$4008@KNOLOGY.NET>
Source record: 37349
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Is it possible for a VSWR meter to read 1 to 1 with reactance at the
antenna?
Ex. If the antenna Z was R= 30 and X= 40 would the meter read 1 to 1?
Or is there a combination of R and X that would give 1 to 1?
Thanks for your answer and
explanations,
Mike

436. Re: VSWR Meter and reactance

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 12:38:06 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <NsCwi.5598$i85.1701@nlpi061.nbdc.sbc.com>
Source record: 37350
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

amdx wrote:
> Is it possible for a VSWR meter to read 1 to 1 with reactance at the
> antenna?
> Ex. If the antenna Z was R= 30 and X= 40 would the meter read 1 to 1?
> Or is there a combination of R and X that would give 1 to 1?

The SWR at the source is lower than the SWR at the
antenna due to losses in the transmission line. 200
feet of RG-58 used on 440 MHz will indicate an SWR
very close to 1:1 at the source no matter how reactive
the load at the antenna. On a normalized Smith Chart,
the SWR "circle" is really a spiral with an end limit
of Z = 1.0 + j0 in the center of the chart.
--
73, Cecil http://www.w5dxp.com

437. W8JK station on the air

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 13:41:13 UTC
From: Bob Dixon <dixon.8@osu.edu>
Message-ID: <dixon.8-CFDC1C.09411315082007@charm.magnus.acs.ohio-state.edu>
Source record: 37351

The callsign of famous antenna inventor John Kraus W8JK will be in special operation from now thru Aug 25. The John Kraus Memorial Amateur Radio Club now has that callsign. In addition, today is the 30th anniversary of the discovery of the famous WOW! signal by the Ohio State University Radio Observatory, so the callsign used is W8JK/WOW.

There is also an announcement on the ARRL web pages, under special events. QST inadvertently left it out of this month's published special events.

Operation will be intermittent, primarily evenings and weekends, and more so during the Ohio QSO party on Aug 25. Announcements will be made on the DX cluster occasionally when the station is on the air.

Complete information about this operation, the club station, the WOW! signal and the OSU Radio Observatory can be found at http://www.w8jk.org and the links there.

Please forward this information to anyone you feel would be interested.

Thanks!

73,

Bob W8ERD, W8JK club trustee

438. Re: VSWR Meter and reactance

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 14:45:30 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <SOydncBI-ddKjF7b4p2dnAA@bt.com>
Source record: 37352
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"amdx" <amdx@knology.net> wrote in message
news:a4b17$46c2ecfc$18d6b40c$4008@KNOLOGY.NET...
> Is it possible for a VSWR meter to read 1 to 1 with reactance at the
> antenna?
> Ex. If the antenna Z was R= 30 and X= 40 would the meter read 1 to 1?
> Or is there a combination of R and X that would give 1 to 1?
> Thanks for your answer and
> explanations,
> Mike
>
Mike

The VSWR meter is showing power reflected back down the line to the meter. If the line is very lossy, like a long length of coax that has been penetrated by water, the reading may well show 1:1 but the radiated power will be zero. On its own, the VSWR meter provides a very useful indication that the antenna system is matched to the output of the transmitter. It is not a guarantee that the system is actually radiating a signal. A simple field strength meter will give an indication that the power supplied via the feeder to the antenna is actually being radiated rather than absorbed.

Cheap VSWR meters can be quite inaccurate when presented with loads which differ from their design impedence. Used with an understanding of their limitations, they are fine for everyday ham use, but something a bit more sophisticated is needed for serious antenna system measurements.

Mike G0ULI

439. Re: VSWR Meter and reactance

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 14:51:30 UTC
From: "i3hev, mario held" <marioheld@tiscali.it>
Message-ID: <46c3122a$0$21208$5fc30a8@news.tiscali.it>
Source record: 37353
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

amdx wrote:

> Is it possible for a VSWR meter to read 1 to 1 with reactance at the
> antenna?...

The vswr is determined by the absolute value of the reflection
coefficient, being defined by:

```
1 + |ro|
vswr = ----------
1 - |ro|
```

where the greek letter "ro" indicates the complex reflection coefficient

```
Z - Zo
ro = ---------- .
Z + Zo
```

So the one and only case in which we can have unity value for vswr is
when |ro| = 0, or perfect match. In a * lossless * transmission line,
the vswr is the same in every point of the line (this is an easily
demonstrable general result, it comes right down from the above
expression), so (with normal lines) the answer is definitely no :)

Of course, as correctly pointed out by Cecil, in a lossy line the
reflection coefficient decreases as you move along the line away from
the termination, and the same happens to the vswr, so that a long lossy
line may simulate a good matching also when the matching isn't even near
to good (btw, using a lossy coax is an often used trick (especially in
microwaves), when you need to give to the generator a seemingly good load).

--
73 es 51 de i3hev, op. mario

Non ï¿½ Radioamatore, se non gli fuma il saldatore!
- Campagna 2006 "Il Radioamatore non ï¿½ uno che ascolta la radio"

it.hobby.radioamatori.moderato
http://digilander.libero.it/hamweb
http://digilander.libero.it/esperantovenezia

440. Re: What is this???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 17:06:50 UTC
From: TerryinDTW <terryindtw@sbcglobal.net>
Message-ID: <1187197610.470683.31270@l22g2000prc.googlegroups.com>
Source record: 37354

Well, I have been told the tennis racket shaped can serve as a turning
web, and in CATV systems it sort of a
"slack eliminator" because solid core cable expands and contracts
differently. I also think that the boxes are too close
together in some parts of the city to be mini cells, although I must
admit that is what I thought they are at first.
The scary thing is that the antennas in some locations are extremely
close to 13,000 volt lines. Oh, and I mentioned the
communications department and the city attorney because I just happen
to know them both. Thanks for your time,
Stuff like this just piques my curiosity.

441. Re: Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 17:30:17 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.15.17.30.15.803809@from.qrz.com>
Source record: 37355

On Tue, 14 Aug 2007 22:31:58 -0400, Roger (K8RI) wrote:

> A lot depends on the current installation, but you have the VHF/UHF
> array at 60 feet. Being 10 feet above the top of the tower that is
> quite a bending moment although to do that I'd assume you have the
> rotator down inside the tower.

Good afternoon, Roger.

The VHF/UHF "array" is merely a vertical, Diamond X3200. I'm quite certain it and the relatively thin wall mast supporting it will break LONG before the tower does even with no additional guying.

However, today I started thinking about maybe putting up a 2-element SteppIR, mostly because I need to operate on MARS frequencies that are a ways outside the 20-meter band. No doubt that becomes a whole 'nother ballgame. I'll start a new thread on that topic.

442. Re: VSWR Meter and reactance

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 17:35:45 UTC
From: "JRCCrabtree@gmail.com" <JRCCrabtree@gmail.com>
Message-ID: <1187199345.403507.226480@57g2000hsv.googlegroups.com>
Source record: 37356
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Aug 15, 7:09?am, "amdx" <a...@knology.net> wrote:
> Is it possible for a VSWR meter to read 1 to 1 with reactance at the
> antenna?
> Ex. If the antenna Z was R= 30 and X= 40 would the meter read 1 to 1?
> Or is there a combination of R and X that would give 1 to 1?
> Thanks for your answer and
> explanations,
> Mike

As others have pointed out, unless the line is lossy, the answer is
no.

Here is a way to calculate SWR from R and X without the complex
arithmetic. It is taken from 'Reflections: transmission lines and
antennas' by Walt Maxwell, 1st ed, page 23-5, or 2nd ed page 'appendix
3-1'.

Let r = R / line impedance
Let x = X / line impedance

b = (1 + r*r + x*x) / r

SWR = (b + SQRT(b*b - 4)) / 2

The minimum value of b is 2 when r = 1 and x = 0

The minimum value of SWR is 1 when b = 2

Hence it can be readily seen that any reactance will cause the the SWR
to be greater than 1 at the load..

Just to complete the maths,the modulus of the relection coefficient,
ie mod(p),
= SQRT((b-2) / (b+2))

HTH and 73

John KC0G

443. 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 17:39:39 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.15.17.39.38.283228@from.qrz.com>
Source record: 37357

Today I started thinking about maybe putting up a 2-element SteppIR beam rather than the 3-element tribander I was considering earlier... main reason for this is the need to be able to operate on MARS frequencies that are a ways outside the 20-meter band, too far outside to use normal triband beams.

I'm wondering if the 2-element SteppIR (30 lbs weight, 4 sq. ft. area) with a Mam-II or Tailtwister rotor (turns out I have both) will be suitable for my 50-foot Rohn 25G.

The tower is currently guyed at 30 feet with heavy-duty stranded steel guy wire (the real stuff, not that flimsy stuff Radio Shack sells) and I'm planning to add another set of guys at the top perhaps using that Phillystran (gotta look that stuff up and learn more about it...).

Do any of you have experience with the 2-element SteppIR and if so, how do you like it?

It seems to me that the boom is mighty short at only 57 inches (1.44 meters). That spaces the elements less than 1/10 wl apart at 14.2 MHz (actually only about 0.07 wl) which seems way too close to me.

444. Re: VSWR Meter and reactance

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 17:42:28 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1187199748.049507.127810@d55g2000hsg.googlegroups.com>
Source record: 37358
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Aug 15, 5:09 am, "amdx" <a...@knology.net> wrote:
> Is it possible for a VSWR meter to read 1 to 1 with reactance at the
> antenna?
> Ex. If the antenna Z was R= 30 and X= 40 would the meter read 1 to 1?
> Or is there a combination of R and X that would give 1 to 1?
> Thanks for your answer and
> explanations,
> Mike

Contrary to what I see in other postings, yes, sure it could. This is very easy to see on the Smith chart. Consider that the meter is calibrated to 50+j0 ohms (which, by the way, it's not guaranteed to be "out of the box" when you first get it!). Consider that connecting the 30+j40 ohm load to the meter are two sections of lossless line. The section connected to the load is 42.1 electrical degrees of 45 ohm line, and the section from there to the SWR meter is 87.7 degrees of 82.5 ohm line. That gives you 50.03-j.01 ohms presented to the meter. Note that 45 ohms is within 10% tolerance of 50 ohms, and 87.7 is a poorly-made 75 ohm line that's out of tolerance. Hey, copper has gotten expensive, and the manufacturer is scrimping to save a few bucks.

Likely the meter is NOT calibrated to 50 ohms, and that would allow a different set of line impedances to achieve a match. With some loads, you only need a single section of line the right length. For example, if you said your meter was calibrated to 50 ohms, and the load was 67+j28 ohms, you'd get a 1:1 SWR reading with 42.6 degrees of 75 ohm line. Note that the actual SWR on that line is NOT 1:1. SWR meters tell you the line SWR only if they are calibrated to the line impedance. Reg Edwards always used to rail against calling them SWR meters, but to me, the name is fine if you understand the need for calibration, the need to apply them properly.

Cheers,
Tom

445. Re: 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 17:59:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <tlf6c3ph6jep3mnorf9gnnqdapjlhlf4g4@4ax.com>
Source record: 37359

On Wed, 15 Aug 2007 13:39:39 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>That spaces the elements less than 1/10 wl apart at 14.2 MHz
>(actually only about 0.07 wl) which seems way too close to me.

Why should it matter if it works?

73's
Richard Clark, KB7QHC

446. Re: VSWR Meter and reactance

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 19:38:46 UTC
From: amdx <amdx@knology.net>
Message-ID: <2a6b6$46c35635$18d6b40c$19281@KNOLOGY.NET>
Source record: 37360
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"amdx" <amdx@knology.net> wrote in message
news:a4b17$46c2ecfc$18d6b40c$4008@KNOLOGY.NET...
> Is it possible for a VSWR meter to read 1 to 1 with reactance at the
> antenna?
> Ex. If the antenna Z was R= 30 and X= 40 would the meter read 1 to 1?
> Or is there a combination of R and X that would give 1 to 1?
> Thanks for your answer and
> explanations,
> Mike

The reason the question arises.
I've build a 2.4Ghz Patch antenna. It has gain. I move the feedpoint to
change the
input impedance. Now it has more signal strength, so I move in the same
direction again
and it shows even more signal strength, 2 more adjustments more signal, 1
more move
and signal strength looks like it's starting to go down in signal strength.
(These moves were about .060" each.)
Now I see a VSWR meter at http://pe2er.nl/wifiswr/
I wonder if this can help me get a handle on adjusting for proper impedance?
The reason I want 50 ohms is because I want to build an array of 4 Patches.
The 50 ohms is important to impedance matching with 1/4 wavelength coax.
I'm using this site as info for the matching and connections.
http://www.darc.de/distrikte/g/T_ATV/Hybrid-Double-Quad-Array-GB.pdf
Yes, I'm using Patches instead of Biquads.

Thanks, Mike

PS. What do you think about the antenna spacing?

So now the problem I don't know what the input impedance is.

447. my knew blog

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 19:52:31 UTC
From: an old fiend <kbprqueer@punce.net>
Message-ID: <46c34d7d$0$16386$88260bb3@free.teranews.com>
Source record: 37361
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,alt.ham-radio.vhf-uhf,alt.usenet.kooks

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it about woger

http://whywogersucks.blogspot.com/

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Posted via a free Usenet account from http://www.teranews.com
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448. Re: 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 19:57:26 UTC
From: ricknj10@hotmail.com
Message-ID: <46c35926.159229125@news.optonline.net>
Source record: 37362

> That spaces the elements less than 1/10 wl apart at 14.2 MHz
>(actually only about 0.07 wl) which seems way too close to me.

Don't say "It seems." Run it on a modeling program, but remember it is only tuned for one frequency, you can tweak it for gain or f/b. I think if you don't need any bandwidth (well at least no more than 3 KHz) you can do quite well with a short boom.

When you consider a SteppIR you need to throw out the old conventional thinking, ecause you have the flexibility to reconfigure the elements the way you want them.

I have a 3 element SteppIR. It is on a 16 ft boom. My HyGain 4 ele on 20 and 5 element monobanders on 10 and 15 had cleaner patterns than the SteppIR, but they were 1.5 times as big. And they didn't work 12 and 17 meters.

Rick K2XT

449. Re: VSWR Meter and reactance

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 20:18:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rfn6c3puqfc3dnlaob8t1dvpb001oubqln@4ax.com>
Source record: 37363
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Wed, 15 Aug 2007 14:38:46 -0500, "amdx" <amdx@knology.net> wrote:

>I've build a 2.4Ghz Patch antenna. It has gain. I move the feedpoint to change the
>input impedance. Now it has more signal strength, so I move in the same direction again
>and it shows even more signal strength, 2 more adjustments more signal, 1 more move
>and signal strength looks like it's starting to go down in signal strength.

Hi Mike,

Looks like you found away to get a low SWR (does it really matter how
much it is if you can't improve the output?).

>(These moves were about .060" each.)
> Now I see a VSWR meter at http://pe2er.nl/wifiswr/
>I wonder if this can help me get a handle on adjusting for proper impedance?

It looks like a pretty good design. Remember to observe the power
limit.

>The reason I want 50 ohms is because I want to build an array of 4 Patches.
>The 50 ohms is important to impedance matching with 1/4 wavelength coax.
>I'm using this site as info for the matching and connections.
> http://www.darc.de/distrikte/g/T_ATV/Hybrid-Double-Quad-Array-GB.pdf
>Yes, I'm using Patches instead of Biquads.

The element lengths will vary (as will the pattern to some degree).

>PS. What do you think about the antenna spacing?

You should stick to THOSE shown on the previous link.

> So now the problem I don't know what the input impedance is.

You've got the plans for a good SWR meter, let it go at that. You
could probably build it faster than waiting for the final benediction
here.

73's
Richard Clark, KB7QHC

450. get kelp

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 20:23:14 UTC
From: Mark@TayleorRobesin.org
Message-ID: <15o6c3hak0opmal3h6tph7196sor27oi48@4ax.com>
Source record: 37364
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc,alt.ham-radio.vhf-uhf,alt.usenet.kooks

On Wed, 15 Aug 2007 15:52:31 -0400, "an old fiend"
<kbprqueer@punce.net> wrote:

>
> it about woger
>
> http://whywogersucks.blogspot.com/
not new or my work

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

451. Re: kelp is good for you

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 20:27:20 UTC
From: Mark@TayleorRobesin.org
Message-ID: <u6o6c3d7vlo8evtr3enij12m387itr6ik6@4ax.com>
Source record: 37365
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

On Sun, 12 Aug 2007 14:54:46 -0700, an_old_friend
<konstans@hotmail.com> wrote:

>On Aug 12, 5:50 pm, "kb9rqz" <kbp...@punce.net> wrote:
>> 1) I was draft into the US Army.
>never said that
>
>> 2) I is a member of the Chemcal Cops
>
>I said in correect gramaur
>
>> 3) The military wont let me retire.
>
>never said that either
>
>> 4) I dosn't serve under the name 'Mark Morgan but that's okay cuz theFBI,
>> DOD, and CIA have al todl me I candodit.
>
>did not say that either
>
>> 5) I is on-the-lam from stalking former marines and fatal
>> atraction four ex-shemale wife almoney
>
>absolutely never said that nor is it true
>
>> 6) I was recenty, paying $5/hr. to acess my ISP
>
>no not rrecently
>
>> 7) I has a 248 IQ, but cant figre out how touse a spel checker.
>
>wrong again
>
>> 8) I is a bi-sexual Pagan male ham who like to be spanked.
>
>true enough
>
>> 9) I can't find any action on the military base in Central IL, so I hav to
>> ask the peple on th USNET.
>nope
>
>on in 9 oh fake

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

452. Re: VSWR Meter and reactance

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 21:12:29 UTC
From: amdx <amdx@knology.net>
Message-ID: <87be3$46c36c35$18d6b40c$32327@KNOLOGY.NET>
Source record: 37366
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:rfn6c3puqfc3dnlaob8t1dvpb001oubqln@4ax.com...
> On Wed, 15 Aug 2007 14:38:46 -0500, "amdx" <amdx@knology.net> wrote:
>
>>I've build a 2.4Ghz Patch antenna. It has gain. I move the feedpoint to
>>change the
>>input impedance. Now it has more signal strength, so I move in the same
>>direction again
>>and it shows even more signal strength, 2 more adjustments more signal, 1
>>more move
>>and signal strength looks like it's starting to go down in signal
>>strength.
>
> Hi Mike,
>
> Looks like you found away to get a low SWR (does it really matter how
> much it is if you can't improve the output?).

Oh, there's always a but,
I cut the foil to the antenna in a wifi adapter and soldered a 2" piece of
coax to the
foil and ground, my Patch is at the other end. The wifi adapter is a dongle
mounted
at the antenna. See Picture at;
http://www.tp-link.com/products/product_des.asp?id=47
Now the question is: Is the wifi adapter output really 50 ohms? If it's
not 50 ohms
then I need not attempt impedance matching with 1/4 Lambda length coax.
I searched for several hours looking for specs on the RF chip in the wifi
adapter
without any success.
>
>>(These moves were about .060" each.)
>> Now I see a VSWR meter at http://pe2er.nl/wifiswr/
>>I wonder if this can help me get a handle on adjusting for proper
>>impedance?
>
> It looks like a pretty good design. Remember to observe the power
> limit.
>
>>The reason I want 50 ohms is because I want to build an array of 4
>>Patches.
>>The 50 ohms is important to impedance matching with 1/4 wavelength coax.

>>I'm using this site as info for the matching and connections.
>> http://www.darc.de/distrikte/g/T_ATV/Hybrid-Double-Quad-Array-GB.pdf
>>Yes, I'm using Patches instead of Biquads.
>
> The element lengths will vary (as will the pattern to some degree).
>
>>PS. What do you think about the antenna spacing?
>
> You should stick to THOSE shown on the previous link.
>
>> So now the problem I don't know what the input impedance is.
>
> You've got the plans for a good SWR meter, let it go at that. You
> could probably build it faster than waiting for the final benediction
> here.
>
> 73's
> Richard Clark, KB7QHC

I don't mind waiting, I don't have any parts for the VSWR meter.
(I was looking for confirmation that it would be useful.)
Regarding the spacing; The literature I've seen shows spacing of
0.2, 0.3 or 0.4 Lambda before grating lobes form. But the Patch is 0.5
Lambda wide so you can't get them closer than 0.5 Lambda.
Here's one source;
http://www.orbanmicrowave.com/The_Basics_of_Antenna_Arrays.pdf
At this point I have a working Patch with good signal strength, so now I'm
just trying to see if I can improve on it, The project has got complicated
because
the only measurement tool I have is the software signal strength meter that
came
with the wifi adapter card.
Thanks for your input,
Mike

453. Re: 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 21:17:22 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.15.21.17.22.394492@from.qrz.com>
Source record: 37367

On Wed, 15 Aug 2007 10:59:09 -0700, Richard Clark wrote:

> Why should it matter if it works?

Good afternoon, Richard.

Well, that's my question! :-)

How well does it work really, compared with, say, an optimum-spaced
2-element fixed-configuration yagi, or a TA-32 type 2-element trap
tribander?

After all, a thousand bucks is a lot of money, at least for me...

454. Re: 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 21:19:59 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.15.21.19.59.252811@from.qrz.com>
Source record: 37368

On Wed, 15 Aug 2007 19:57:26 +0000, Rick wrote:

> I have a 3 element SteppIR. It is on a 16 ft boom.

Good afternoon, Rick.

What kind of a mast or tower is it on, and what rotator are you using to
turn it?

455. Coax traps

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 21:22:01 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns998E4AEB76E2Cnonenowhere@61.9.191.5>
Source record: 37369

I have done some more work on modelling coax traps...

The article I wrote in March proposing a transmission line explanation for the operation of the traps has been revised to compare some of the alternative explanations to the transmission line explanation, the article is at http://www.vk1od.net/coaxtrap/index.htm .

Bringing it all together, another article at http://www.vk1od.net/coaxtrap/8040.htm designs an 80/40 trap dipole using the bootstrap coax trap configuration, and models the antenna system (including trap losses) on the two bands.

Feedback on the technique, errors, flaws etc are welcome.

Owen

456. R7 or similar antennas Eznec model?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 21:27:22 UTC
From: Guido <nospam@nospam.nospam>
Message-ID: <f9vr4g$7h6$1@tdi.cu.mi.it>
Source record: 37370

Has someone modeled this off center fed vertical dipole with Eznec?
Antennas of this family are Cushcraft R7, R7000, R8, Hy Gain DX77, AV640,
etc.
Thanks and 73
Guido, ik2bcp

457. Re: VSWR Meter and reactance

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 21:34:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <oir6c3puku61iia0ck6n13lsnj63fbj2fe@4ax.com>
Source record: 37371
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Wed, 15 Aug 2007 16:12:29 -0500, "amdx" <amdx@knology.net> wrote:

> Now the question is: Is the wifi adapter output really 50 ohms? If it's
>not 50 ohms
>then I need not attempt impedance matching with 1/4 Lambda length coax.

Hi Mike,

There are very, very, very few antenna designs that arrive out of the box with 50 Ohms Z. You usually have to manipulate something (feed point or linear loading, or coupling between elements or other radiators) to get it.

The good thing about microwaves is that you can build and test so quickly - and throw away what doesn't work. This isn't like you are making jewelry after all.

The scale of construction is one you can get your arms around at the kitchen table. If someone reliable built one and documented it enough (both of these provisos are, admittedly, built on a LOT of trust); then you don't need any instrumentation at all.

>I searched for several hours looking for specs on the RF chip in the wifi
>adapter without any success.

It sometimes takes some deep digging.

> Regarding the spacing; The literature I've seen shows spacing of
>0.2, 0.3 or 0.4 Lambda before grating lobes form. But the Patch is 0.5
>Lambda wide so you can't get them closer than 0.5 Lambda.
>Here's one source;
>http://www.orbanmicrowave.com/The_Basics_of_Antenna_Arrays.pdf

Pretty tedious stuff, that. EZNEC can do it all in real time - even the free version is sufficient for your purposes. For one, don't confuse matching with the radiation lobes - those issues are separable and you can ignore matching to examine lobes.

> At this point I have a working Patch with good signal strength, so now I'm
>just trying to see if I can improve on it,

Give yourself the benefit of the doubt and just move forward - the rest is analysis paralysis.

73's
Richard Clark, KB7QHC

458. Re: 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 21:38:45 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns998E4DC1C4D23nonenowhere@61.9.191.5>
Source record: 37372

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in
news:pan.2007.08.15.17.39.38.283228@from.qrz.com:

...
> I'm planning to add another set of guys at the top perhaps using that
> Phillystran (gotta look that stuff up and learn more about it...).

Rick, something to keep in mind in this day and age is that synthetic guys are somewhat more at risk of vandalism, and to counter that, the section of the guy that is reachable to a person is often made of flexible steel wire rope (FSWR) where vandalism is a risk.

If you decide to use their pre-formed dead ends, read the instructions on installation including end sealing of the guy material.

Owen

459. Re: 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 22:03:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bbs6c31c2qkd1d0pp04t13nirtf4aauq6h@4ax.com>
Source record: 37373

On Wed, 15 Aug 2007 17:17:22 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>On Wed, 15 Aug 2007 10:59:09 -0700, Richard Clark wrote:
>
>> Why should it matter if it works?
>
>Good afternoon, Richard.
>
>Well, that's my question! :-)
>
>How well does it work really, compared with, say, an optimum-spaced
>2-element fixed-configuration yagi, or a TA-32 type 2-element trap
>tribander?
>
>After all, a thousand bucks is a lot of money, at least for me...

Hi Rick,

You could ask the same question for any decision - just means its the
wrong question.

We could all pitch in innumerable suggestions to a variety of "won't
works" from you, and will it move you an inch away from the SteppIR?

In engineering, if you can fully qualify your question, it has the
answer built in for free (you don't even need to ask for advice).

Clearly you have made a choice and this is more about validation,
hence my response to "why should it matter about picayune details."
The SteppIR's claim to fame is being infinitely variable. You freely
twist knobs until you achieve a match, what you get is what you get
(sort of a SteppZen outcome, isn't it?). If you cannot adjust the
distance between elements - what more is to be said? It sucks?

Probably, but then again, not so much as to discard it as useless
because it probably works better than a dipole. Even if it works only
as good as a dipole, it's resonant and rotatable. If that isn't good
enough, then you are buying a pig in a poke.

The real question is, do you know the performance of the SteppIR at
the frequency of your choice? If not, then it is an expensive pig in
a poke.

To this point, you have through various threads identified you need to
be frequency agile and quick. Myself, I haven't seen many choices you
have lead yourself toward that really qualify in that regard - so I am

suspicious of those qualifiers. The SteppIR certainly doesn't even come close to the span of frequency you've identified (2 MHz to 20MHz), and you are beginning to accumulate quite an antenna farm as it is.

There are an infinite variety of antennas, and some actually do achieve exactly those criteria but you hedge away from them and space considerations seems to rise here. It would seem you have to come to terms with space restrictions and those choices left are going to have some pain involved. You may achieve frequency agility, but not speed, and not for cheap.

You want to try again? When I was teaching electronics in the Navy, we had an acronym to advise our students during tests:
RTMFQ
For the easily offended (although I didn't know many in the Nav, there seem to be some here), it should read in your case WTMFQ
Write The Meticulously Formulated Question.
If you cannot find the answer within, you weren't meticulous enough.
My bet is it will mean beaucoup bucks or you are going to shave off "must haves."

73's
Richard Clark, KB7QHC

460. BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 22:56:42 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa00bi$dp1$2@news.albasani.net>
Source record: 37374

http://www.redherring.com/Home/22562

JS

461. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-15 23:45:15 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
Message-ID: <46c38f63$0$16529$4c368faf@roadrunner.com>
Source record: 37375

John Smith I wrote:
> http://www.redherring.com/Home/22562
>
> JS

Allot like dumping crude oil into a creek for 'Easy Transportation to
the Refinery', no extra infrastructure required.

462. Re: Cellular yagi help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 01:30:08 UTC
From: szilagyic <chris@groupinfo.com>
Message-ID: <1187227808.812721.171450@i13g2000prf.googlegroups.com>
Source record: 37376
Cross-posted to: alt.cellular-phone-tech,rec.radio.amateur.antenna

On Jul 29, 8:43 pm, "J. Mc Laughlin" <j...@power-net.net> wrote:
> Dear Chris:
>
> Others have pointed out the expected large loss in the RG58 type coax
> and the difficulty in designing an antenna to cover the two bands that you
> mentioned.
>
> You may find the FCC ID number of your phone/card and go to the FCC's
> site to learn the band or bands that your communication device is able to
> operate on. It is possible that the device is only able to operate on one
> band. I have heard of cases where a device was able to operate on more than
> one band but needed the operator to execute an instruction to cause the
> device to find the best band. (In other words, apparently some devices do
> not ascertain continually what band has the best SNR.)
>
> When you have changed the coax, do report back.
>
> Regards, Mac N8TT
>
> --
> J. Mc Laughlin; Michigan U.S.A.
> Home: J...@Power-Net.Net
>

Thank you very much for all of the feedback in this thread. I have
finally swapped out the original RG58U coax with LMR-400, and the
difference is phenominal. At our test location, we were getting
around 40% signal with the RG58U hooked to our yagi. When I swapped
out the RG58U cable with the LMR-400 cable, we got all the way to
100%! So it appears our yagi is working good, too, at whatever
frequency we are running at here.

Thanks again for all of the help ....
--
Chris

463. Re: VSWR Meter and reactance

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 02:05:24 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <vKednSeATN9_LV7bnZ2dnUVZ_vShnZ2d@comcast.com>
Source record: 37377
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

"amdx" <amdx@knology.net> wrote in message
news:87be3$46c36c35$18d6b40c$32327@KNOLOGY.NET...
>
> Now the question is: Is the wifi adapter output really 50 ohms? If it's
> not 50 ohms.....

Possibly, but it is immaterial. It is probably meant to drive rated power
into a 50 Ohm load.

Tam

464. Re: Two Good Days Spent with Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 02:27:53 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46c3b629$0$18960$4c368faf@roadrunner.com>
Source record: 37378

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:dzwvi.84118$dI1.27274@newsfe08.phx...
>
> "John Ferrell" <johnferrell@sprintmail.com> wrote in message
> news:t0crb3h3hovf0fjtanph793092eprunf24@4ax.com...
>
>
>> >
>> Don't overlook that you can parallel two quads to get to 50 ohms as
>> well!
>
>
> OK, I took a mental excursion in that direction. My first thought is to
> use
> two runs of RG-62 93-ohm computer drop cable off a t-connector. This goes
> against my grain -- I've always hated using any t-connectors in a matched
> system -- but I guess the match will be maintained.
>
> My second thought is to literally parallel them at the end of a hunk of
> 50-ohm cable. That feed would need to be crossed over, I think, so the
> fields would be additive. Easy enough to test it both ways, I suppose.
> If
> crossover is needed, what would the pattern look like without it?
> Hm-m-m-m
> ... near-field cancellation and no pattern? Pattern rotation?
>
> Of course I will be trying this next idea even if no newsgroup answer is
> forthcoming: What happens if I tap off quad #1 on the side _opposite_
> where I'm feeding it and connect quad #2 there? Wouldn't this additional
> load reflect back to feed #1 and lower its impedance toward 50 ohms? I
> don't know what feed #2 would be. Perhaps a jury-rig parallel line
> calculated to be 100 ohms would do it. (# 10 AWG wires on 5 mm centers
> would
> do it.) Phasing will be an issue.
> [I probably don't have a suitable test environment to tell success from
> failure.]
>
> 73,
> "Sal"
>
>

Stacking two 100 ohm impedance quads is electrically about as easy as it
gets. An electrical 1/4wl of any good quality coax from each antenna to a T.

50 ohm cable to the shack.

Jimmie.

465. Re: Two Good Days Spent with Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 02:54:58 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <70Pwi.60706$vS1.34893@newsfe16.phx>
Source record: 37379

"Jimmie D" <GFENDER@carolina.rr.com> wrote in message
news:46c3b629$0$18960$4c368faf@roadrunner.com...
> >
>
> Stacking two 100 ohm impedance quads is electrically about as easy as it
> gets. An electrical 1/4wl of any good quality coax from each antenna to a
T.
> 50 ohm cable to the shack.

Thanks. I would've thought it needed to be 1/4w/l of 75-ohm cable, but
I'll try it.

466. Re: my knew blog

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 03:01:03 UTC
From: Ron <apositiveplace@netscape.net>
Message-ID: <U5Pwi.102758$g86.38213@newsfe14.lga>
Source record: 37380
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

plonk

"an old fiend" <kbprqueer@punce.net> wrote in message
news:46c34d7d$0$16386$88260bb3@free.teranews.com...
>
> it about woger
>
> http://whywogersucks.blogspot.com/
>
>
>
>
> --
> Posted via a free Usenet account from http://www.teranews.com
>

467. Re: W8JK station on the air

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 03:07:28 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <V9OdnaBLyKgUXV7bnZ2dnUVZ_gqdnZ2d@bright.net>
Source record: 37381

Dear Bob:

Great news. Professor Kraus was a great engineer, a fine person, and
the best mentor to me. It is wonderful that you, and your crew, are helping
to keep alive what he has taught us all.

73, Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Bob Dixon" <dixon.8@osu.edu> wrote in message
news:dixon.8-CFDC1C.09411315082007@charm.magnus.acs.ohio-state.edu...
> The callsign of famous antenna inventor John Kraus W8JK will be in
> special operation from now thru Aug 25. The John Kraus Memorial Amateur
> Radio Club now has that callsign. In addition, today is the 30th
> anniversary of the discovery of the famous WOW! signal by the Ohio State
> University Radio Observatory, so the callsign used is W8JK/WOW.
>
> There is also an announcement on the ARRL web pages, under special
> events. QST inadvertently left it out of this month's published special
> events.
>
> Operation will be intermittent, primarily evenings and weekends, and
> more so during the Ohio QSO party on Aug 25. Announcements will be made
> on the DX cluster occasionally when the station is on the air.
>
> Complete information about this operation, the club station, the WOW!
> signal and the OSU Radio Observatory can be found at
> http://www.w8jk.org and the links there.
>
> Please forward this information to anyone you feel would be interested.
>
> Thanks!
>
> 73,
>
> Bob W8ERD, W8JK club trustee

468. get kelp

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 03:28:46 UTC
From: Mark@TayleorRobesin.org
Message-ID: <s2h7c3tbqt4nvrqjeupg2f7c3uruggq89h@4ax.com>
Source record: 37282
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

On Wed, 15 Aug 2007 22:01:03 -0500, "Ron"
<apositiveplace@netscape.net> wrote:

>plonk
>

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

469. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 04:39:02 UTC
From: gsm@mendelson.com
Message-ID: <slrnfc7l3c.tdt.gsm@cable.mendelson.com>
Source record: 37283

John Smith I wrote:
> http://www.redherring.com/Home/22562

It's "your" own fault. When I complained to Google, no one else did.
When I suggested a boycott of Google, everyone thought I was crazy.

It was "your" choice, Google and their BPL, or Ham radio.
Which did you decide?

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

470. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 05:03:25 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa0lr6$o3q$1@news.albasani.net>
Source record: 37284

Geoffrey S. Mendelson wrote:

> ...
> It was "your" choice, Google and their BPL, or Ham radio.
> Which did you decide?
>
> Geoff.
>

When the sword challenged the rock, the sword won. When the gun challenged the sword, the gun won. When the automobile challenged the horse, the auto won. When the washing machine challenged the washboard, the machine won. When tubes challenged the spark-gap xmitter, the tube won. When penicillin challenged herbs, penicillin won. When the birth control pill challenged the condom, the pill won.

Now the internet challenges code tapping amateurs ...

Regards,
JS

471. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 05:14:24 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa0mfqpbb1@news.albasani.net>
Source record: 37285

John Smith I wrote:
> Geoffrey S. Mendelson wrote:
>
> > ...
>> It was "your" choice, Google and their BPL, or Ham radio. Which did
>> you decide?
>>
>> Geoff.
>>
>
> When the sword challenged the rock, the sword won. When the gun
> challenged the sword, the gun won. When the automobile challenged the
> horse, the auto won. When the washing machine challenged the washboard,
> the machine won. When tubes challenged the spark-gap xmitter, the tube
> won. When penicillin challenged herbs, penicillin won. When the birth
> control pill challenged the condom, the pill won.
>
> Now the internet challenges code tapping amateurs ...
>
> Regards,
> JS

Oh yeah, and I forgot, but you are quite correct. They were warned;
and, they thought they knew better. But then, their history does not
reflect one of a well educated or "gray matter endowed" group ... the
few intelligent amateurs' voice were drowned out by the insane masses
... now we have what they strode towards with such determination, while
beating out a war march tune on their brass keys--amateur freqs will be
assimilated by the internet, resistance is futile ... and God seen this
was good ...

Regards,
JS

472. Re: Two Good Days Spent with Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 05:17:03 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns998E9B74A192Bnonenowhere@61.9.191.5>
Source record: 37286

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in
news:70Pwi.60706$vS1.34893@newsfe16.phx:

>
> "Jimmie D" <GFENDER@carolina.rr.com> wrote in message
> news:46c3b629$0$18960$4c368faf@roadrunner.com...
>> >
>>
>> Stacking two 100 ohm impedance quads is electrically about as easy as
>> it gets. An electrical 1/4wl of any good quality coax from each
>> antenna to a
> T.
>> 50 ohm cable to the shack.
>
> Thanks. I would've thought it needed to be 1/4w/l of 75-ohm cable,
> but
> I'll try it.

You are right to question to advice Sal.

Of course with a 1/4wl with VSWR=2, the Zo does matter.

However, Jimmie might have meant each leg to be a 1/2wl (electrical)...
close wasn't it! In that case, Zo isn't critical.

Owen

473. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 06:07:17 UTC
From: John Navas <spamfilter1@navasgroup.com>
Message-ID: <0cq7c3def3f3rdpt56urvgf6c3ntekbk28@4ax.com>
Source record: 37287
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

On Thu, 19 Jul 2007 18:43:58 -0700, Don Bowey <dbowey@comcast.net> wrote
in <C2C5616E.700B1%dbowey@comcast.net>:

>On 7/19/07 4:42 PM, in article 1mtv93ticddur8rq3tghsra57n9508mci0@4ax.com,
>"John Navas" <spamfilter1@navasgroup.com> wrote:
>
>> On Thu, 19 Jul 2007 14:45:00 GMT, jimp@specsol.spam.sux.com wrote in
>> <tp94n4-17l.ln1@mail.specsol.com>:
>>
>>> In rec.radio.amateur.antenna Radium <glucegen1@gmail.com> wrote:
>>
>>>> Digital cell phones should stop using the compression they use and
>>>> start using monaural WMA compression with a CBR of 20 kbps or less and
>>>> a sample rate of at least 44.1 KHz. In addition, the following must
>>>> also apply:
>>>
>>> The audio bandwidth of the phone system is about 3 KHz.
>>
>> Actually more like 10 KHz.
>
>If he is commenting on the bandwidth of a message network channel/circuit,
>including cellular, it is about 3 kHz.

Audio. Suggest you read more carefully.

--
Best regards, FAQ FOR CINGULAR WIRELESS:
John Navas <http://en.wikibooks.org/wiki/Cingular_Wireless_FAQ>

474. Re: my knew blog

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 06:38:22 UTC
From: N2QSX <N2QSX@n3qsx.net>
Message-ID: <46c3e4a0$0$1099$88260bb3@free.teranews.com>
Source record: 37288
Cross-posted to:
rec.radio.amateur.policy,alt.support.child-protective-services,alt.autos.mini,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

```
ron lets gav plonk in his mouth
Ron wrote:
> plonk
>
> "an old fiend" <kbprqueer@punce.net> wrote in message
> news:46c34d7d$0$16386$88260bb3@free.teranews.com...
>> it about woger
>>
>> http://whywogersucks.blogspot.com/
>>
>>
>>
>>
>> --
>> Posted via a free Usenet account from http://www.teranews.com
>>
>
>
>

--
Posted via a free Usenet account from http://www.teranews.com
```

475. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 07:39:25 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1187249965.804662.296950@l22g2000prc.googlegroups.com>
Source record: 37289
Cross-posted to: sci.electronics.basics,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

On Aug 15, 11:07 pm, John Navas <spamfilt...@navasgroup.com> wrote:
> On Thu, 19 Jul 2007 18:43:58 -0700, Don Bowey <dbo...@comcast.net> wrote
> in <C2C5616E.700B1%dbo...@comcast.net>:
>
>
>
>
>
> >On 7/19/07 4:42 PM, in article 1mtv93ticddur8rq3tghsra57n9508m...@4ax.com,
> >"John Navas" <spamfilt...@navasgroup.com> wrote:
>
> >> On Thu, 19 Jul 2007 14:45:00 GMT, j...@specsol.spam.sux.com wrote in
> >> <tp94n4-17l....@mail.specsol.com>:
>
> >>> In rec.radio.amateur.antenna Radium <gluceg...@gmail.com> wrote:
>
> >>>> Digital cell phones should stop using the compression they use and
> >>>> start using monaural WMA compression with a CBR of 20 kbps or less and
> >>>> a sample rate of at least 44.1 KHz. In addition, the following must
> >>>> also apply:
>
> >>> The audio bandwidth of the phone system is about 3 KHz.
>
> >> Actually more like 10 KHz.
>
> >If he is commenting on the bandwidth of a message network channel/circuit,
> >including cellular, it is about 3 kHz.
>
> Audio. Suggest you read more carefully.
>
> --
> Best regards, FAQ FOR CINGULAR WIRELESS:
> John Navas <http://en.wikibooks.org/wiki/Cingular_Wireless_FAQ>- Hide quoted text -
>
> - Show quoted text -

DOH ! Suggest that you not Reply and
Re-Cross-Post to Rec.Radio.Shortwave.
.
.
. .

476. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 11:29:12 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <ZeKdnXSDCIaYqFnbnZ2dnUVZ_hKdnZ2d@giganews.com>
Source record: 37290
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

"John Navas" <spamfilter1@navasgroup.com> wrote in message
news:0cq7c3def3f3rdpt56urvgf6c3ntekbk28@4ax.com...
> On Thu, 19 Jul 2007 18:43:58 -0700, Don Bowey <dbowey@comcast.net> wrote
> in <C2C5616E.700B1%dbowey@comcast.net>:
>
>>On 7/19/07 4:42 PM, in article 1mtv93ticddur8rq3tghsra57n9508mci0@4ax.com,
>>"John Navas" <spamfilter1@navasgroup.com> wrote:
>>
>>> On Thu, 19 Jul 2007 14:45:00 GMT, jimp@specsol.spam.sux.com wrote in
>>> <tp94n4-17l.ln1@mail.specsol.com>:
>>>
>>>> In rec.radio.amateur.antenna Radium <glucegen1@gmail.com> wrote:
>>>
>>>>> Digital cell phones should stop using the compression they use and
>>>>> start using monaural WMA compression with a CBR of 20 kbps or less and
>>>>> a sample rate of at least 44.1 KHz. In addition, the following must
>>>>> also apply:
>>>>
>>>> The audio bandwidth of the phone system is about 3 KHz.
>>>
>>> Actually more like 10 KHz.
>>
>>If he is commenting on the bandwidth of a message network channel/circuit,
>>including cellular, it is about 3 kHz.
>
> Audio. Suggest you read more carefully.
>
> --
> Best regards, FAQ FOR CINGULAR WIRELESS:
> John Navas <http://en.wikibooks.org/wiki/Cingular_Wireless_FAQ>

POTS phone lines are very limited. IIRC from my work with those systems,
about 300-3600 Hz. Strictly human voice range, not meant for hi-fi. Special
lines are still available for hi-fi use as audio STL's.

477. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 12:08:01 UTC
From: Jay in the Mojave <jay123a@qnet.com>
Message-ID: <13c8fh47nmkv4d3@corp.supernews.com>
Source record: 37291

John Smith I wrote:
> http://www.redherring.com/Home/22562
>
> JS

Hello John and all:

One of the things that I haven't seen covered about BPL, is the installation and maintenance costs involved, in a power grid system.

We all know that when a system is modified for something that it wasn't designed for that problems will surface. I'll bet money that the power grid system modification and maintenance may be have a significant cost. That was not totally covered, or audited.

Jay in the Mojave

478. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 12:23:16 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
Message-ID: <46C441B4.8040708@coboxincORORATED.com>
Source record: 37292

John Smith I wrote:
> Geoffrey S. Mendelson wrote:
>
> > ...
>
>> It was "your" choice, Google and their BPL, or Ham radio. Which did
>> you decide?
>>
>> Geoff.
>>
>
> When the sword challenged the rock, the sword won. When the gun
> challenged the sword, the gun won. When the automobile challenged the
> horse, the auto won. When the washing machine challenged the washboard,
> the machine won. When tubes challenged the spark-gap xmitter, the tube
> won. When penicillin challenged herbs, penicillin won. When the birth
> control pill challenged the condom, the pill won.
>
> Now the internet challenges code tapping amateurs ...
>
> Regards,
> JS

This has nothing to do with the Internet or code tapping amateurs.

It has to do with some intellectually devoid engineers challenging the reality of the Nyquist rate and placing a device on the only radio frequencys that can be naturally propagated through out the planet.

This group will be beaming porn wirelessly throughout the world, what an accomplishment. They should feel proud!

Chris

479. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 12:29:42 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <WqXwi.13993$ya1.2715@news02.roc.ny>
Source record: 37293

Christopher Cox wrote:
> John Smith I wrote:
>
>> ...
>>
>> Now the internet challenges code tapping amateurs ...
>>
>
> This has nothing to do with the Internet or code tapping amateurs.
>
> It has to do with some intellectually devoid engineers challenging the
> reality of the Nyquist rate and placing a device on the only radio
> frequencys that can be naturally propagated through out the planet.

No, I think the engineers are saying 'It can be done, but it will interfere...' and the bean counters look at the 'but it will interfere...' part as the obstacle to overcome (buy off). Engineers don't call the shots, the lawyers and accountants do. If you want someone or something to blame, blame the 'any profit is good' mind set of the greed heads and the politicians who obey their big campaign contributors.

480. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 13:14:04 UTC
From: nm5k@wt.net
Message-ID: <1187270044.143075.311010@i13g2000prf.googlegroups.com>
Source record: 37294

On Aug 16, 12:03 am, John Smith I <assemblywiz...@gmail.com> wrote:
> Geoffrey S. Mendelson wrote:
>
> > ...
>
> > It was "your" choice, Google and their BPL, or Ham radio.
> > Which did you decide?
>
> > Geoff.
>
> When the sword challenged the rock, the sword won. When the gun
> challenged the sword, the gun won. When the automobile challenged the
> horse, the auto won. When the washing machine challenged the washboard,
> the machine won. When tubes challenged the spark-gap xmitter, the tube
> won. When penicillin challenged herbs, penicillin won. When the birth
> control pill challenged the condom, the pill won.
>
> Now the internet challenges code tapping amateurs ...

When my henry 2k classic and yagi pointed at the power line challenges
BPL...
Hummmm, this could get ugly... No matter what mode I use. BPL is a two
lane highway. I should be as much of a pest them to them, as them to
me..
Two weeks of me, and I'll have the BPL/power company speaking in
tongues if
they ever decide to install that mess around here.
MK

481. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 13:21:08 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
Message-ID: <46c44e91$0$15385$4c368faf@roadrunner.com>
Source record: 37295

```
gwatts wrote:
> Christopher Cox wrote:
>
>> John Smith I wrote:
>>
>>> ...
>>>
>>> Now the internet challenges code tapping amateurs ...
>>>
>>
>> This has nothing to do with the Internet or code tapping amateurs.
>>
>> It has to do with some intellectually devoid engineers challenging the
>> reality of the Nyquist rate and placing a device on the only radio
>> frequencys that can be naturally propagated through out the planet.
>
>
> No, I think the engineers are saying 'It can be done, but it will
> interfere...' and the bean counters look at the 'but it will
> interfere...' part as the obstacle to overcome (buy off). Engineers
> don't call the shots, the lawyers and accountants do. If you want
> someone or something to blame, blame the 'any profit is good' mind set
> of the greed heads and the politicians who obey their big campaign
> contributors.

I apologize for specifying "Engineers" in my previous post, it was not
intentional.

It is frustrating when fact is trumped by the use of relentless verbiage.

Chris
```

482. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 13:52:55 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <C2E9A4C7.739F3%dbowey@comcast.net>
Source record: 37296
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

On 8/15/07 11:07 PM, in article 0cq7c3def3f3rdpt56urvgf6c3ntekbk28@4ax.com,
"John Navas" <spamfilter1@navasgroup.com> wrote:

> On Thu, 19 Jul 2007 18:43:58 -0700, Don Bowey <dbowey@comcast.net> wrote
> in <C2C5616E.700B1%dbowey@comcast.net>:
>
>> On 7/19/07 4:42 PM, in article 1mtv93ticddur8rq3tghsra57n9508mci0@4ax.com,
>> "John Navas" <spamfilter1@navasgroup.com> wrote:
>>
>>> On Thu, 19 Jul 2007 14:45:00 GMT, jimp@specsol.spam.sux.com wrote in
>>> <tp94n4-17l.ln1@mail.specsol.com>:
>>>
>>>> In rec.radio.amateur.antenna Radium <glucegen1@gmail.com> wrote:
>>>
>>>>> Digital cell phones should stop using the compression they use and
>>>>> start using monaural WMA compression with a CBR of 20 kbps or less and
>>>>> a sample rate of at least 44.1 KHz. In addition, the following must
>>>>> also apply:
>>>>
>>>> The audio bandwidth of the phone system is about 3 KHz.
>>>
>>> Actually more like 10 KHz.
>>
>> If he is commenting on the bandwidth of a message network channel/circuit,
>> including cellular, it is about 3 kHz.
>
> Audio. Suggest you read more carefully.

Audio WHAT? Read what more carefully? Are you attempting to say the audio
bandwidth of a message network channel is greater than about 3 kHz?

483. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 13:55:02 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <WGYwi.14137$B25.13060@news01.roc.ny>
Source record: 37297

```
Christopher Cox wrote:
> gwatts wrote:
>
>> Christopher Cox wrote:
>>
>>> John Smith I wrote:
>>>
>>>> ...
>>>>
>>>> Now the internet challenges code tapping amateurs ...
>>>>
>>>
>>> This has nothing to do with the Internet or code tapping amateurs.
>>>
>>> It has to do with some intellectually devoid engineers challenging
>>> the reality of the Nyquist rate and placing a device on the only
>>> radio frequencys that can be naturally propagated through out the
>>> planet.
>>
>>
>>
>> No, I think the engineers are saying 'It can be done, but it will
>> interfere...' and the bean counters look at the 'but it will
>> interfere...' part as the obstacle to overcome (buy off). Engineers
>> don't call the shots, the lawyers and accountants do. If you want
>> someone or something to blame, blame the 'any profit is good' mind set
>> of the greed heads and the politicians who obey their big campaign
>> contributors.
>
>
>
>
> I apologize for specifying "Engineers" in my previous post, it was not
> intentional.

'Engineer' has become a generic term. It's easy to understand why many
different professions tend to be referred to as 'engineers,' it has a
ring of technical competence to it, for now, and that's why it's
co-opted so often.

> It is frustrating when fact is trumped by the use of relentless verbiage.

Or by relentless, willful ignorance, like that on the part of the FCC
when it comes to BPL (and a few other services...sigh). The FCC has
become another heavily politicized entity run by party hacks endeavoring
```

to abrogate the rights of the little people in favor of the almighty, short-term bottom line.

Don't get me wrong, I think profits are good, but not at any cost and certainly not at the expense of future generations, expenses economic, social, environmental...

Sigh,
Galen, W8LNA

484. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 14:13:38 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa1m2q$5lr$1@news.albasani.net>
Source record: 37298

Christopher Cox wrote:

> ...
> This has nothing to do with the Internet or code tapping amateurs.
>
> It has to do with some intellectually devoid engineers challenging the
> reality of the Nyquist rate and placing a device on the only radio
> frequencys that can be naturally propagated through out the planet.
>
> This group will be beaming porn wirelessly throughout the world, what an
> accomplishment. They should feel proud!
>
>
> Chris

The old failed logic recycled one more time; go keep track of who had licenses before code was dropped ... eat your lotus blossoms--it always worked before ...

JS

485. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 14:16:27 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa1m83$5lr$2@news.albasani.net>
Source record: 37299

gwatts wrote:

> ...
> No, I think the engineers are saying 'It can be done, but it will
> interfere...' and the bean counters look at the 'but it will
> interfere...' part as the obstacle to overcome (buy off). Engineers
> don't call the shots, the lawyers and accountants do. If you want
> someone or something to blame, blame the 'any profit is good' mind set
> of the greed heads and the politicians who obey their big campaign
> contributors.

I think you got it all wrong ...

Thinking people decided amateur radio could be left as it is, a good ole boys club of cranky old men communicating at a few WPM ... or, be used to assist millions in high speed data exchange ... the jet plane challenges the horse drawn cart.

JS

486. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 14:21:10 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa1mgv$5lr$3@news.albasani.net>
Source record: 37300

nm5k@wt.net wrote:

> ...
> When my henry 2k classic and yagi pointed at the power line challenges
> BPL...
> Hummmm, this could get ugly... No matter what mode I use. BPL is a two
> lane highway. I should be as much of a pest them to them, as them to
> me..
> Two weeks of me, and I'll have the BPL/power company speaking in
> tongues if
> they ever decide to install that mess around here.
> MK
>

You just don't get the power of digital do you? Or, the laws which will
come ... however, confiscation of that ancient and moth ridden amp and
the fine which will be imposed will be something sane men will wish to
avoid ... I have a 5KW (never run over a calif kilo of input though :-)
)russian amp, its' last days are in sight :-(

JS

487. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 14:23:53 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa1mm1$5lr$4@news.albasani.net>
Source record: 37301

Jay in the Mojave wrote:

> ...
> Jay in the Mojave

From all I have seen, nothing is modified, a tap is made and BPL
installed. The power grid stands as before ... however, the system I
looked at was almost entirely underground to businesses and homes.

JS

488. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 14:26:26 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa1mqq$5lr$5@news.albasani.net>
Source record: 37302

Radium wrote:

> ...
> Analog cell phones should stop using FM and should start using AM at
> whatever practical radio frequencies available.
> ...

Soon (a few years, already begun) all analog phones will ceases to
exist; the bandwidth is just too valuable to use up with analog
modulation ...

JS

489. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 14:29:33 UTC
From: D Peter Maus <DPeterMaus@worldnet.att.net>
Message-ID: <hbZwi.433778$p47.239378@bgtnsc04-news.ops.worldnet.att.net>
Source record: 37303
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

```
Brenda Ann wrote:
> "John Navas" <spamfilter1@navasgroup.com> wrote in message
> news:0cq7c3def3f3rdpt56urvgf6c3ntekbk28@4ax.com...
>> On Thu, 19 Jul 2007 18:43:58 -0700, Don Bowey <dbowey@comcast.net> wrote
>> in <C2C5616E.700B1%dbowey@comcast.net>:
>>
>>> On 7/19/07 4:42 PM, in article 1mtv93ticddur8rq3tghsra57n9508mci0@4ax.com,
>>> "John Navas" <spamfilter1@navasgroup.com> wrote:
>>>
>>>> On Thu, 19 Jul 2007 14:45:00 GMT, jimp@specsol.spam.sux.com wrote in
>>>> <tp94n4-17l.ln1@mail.specsol.com>:
>>>>
>>>>> In rec.radio.amateur.antenna Radium <glucegen1@gmail.com> wrote:
>>>>>> Digital cell phones should stop using the compression they use and
>>>>>> start using monaural WMA compression with a CBR of 20 kbps or less and
>>>>>> a sample rate of at least 44.1 KHz. In addition, the following must
>>>>>> also apply:
>>>>> The audio bandwidth of the phone system is about 3 KHz.
>>>> Actually more like 10 KHz.
>>> If he is commenting on the bandwidth of a message network channel/circuit,
>>> including cellular, it is about 3 kHz.
>> Audio. Suggest you read more carefully.
>>
>> --
>> Best regards, FAQ FOR CINGULAR WIRELESS:
>> John Navas <http://en.wikibooks.org/wiki/Cingular_Wireless_FAQ>
>
> POTS phone lines are very limited. IIRC from my work with those systems,
> about 300-3600 Hz. Strictly human voice range, not meant for hi-fi. Special
> lines are still available for hi-fi use as audio STL's.
>
>

I engineered a remote in Chicago a number of years ago, and the
client wouldn't spring for ISDN, or equalized lines. ATT provided a POTS
line and we got 8k analog audio out of it. Then again, we were next to
an ATT store. Similar performance was observed at my condo in Heather
Ridge. Here at the house, not two miles away, I'm lucky to hit 14.4
modem speeds, and 3k audio on a good day with my POTS line.

Guaranteed performance, you're right, is only 300 to 3600Hz, and
14.4k modem speed. But real performance varies from company to company,
CO to CO, line to line. And surprisingly good audio and high modem
```

speeds, are possible with POTS technology. The instruments, themselves, are bandwidth limited. But the lines are often, but not always, much wider than the instrument. That's why, when addressing the phone with a hybrid, or repeating coil, directly, I have always been able to get passable audio on a POTS line. With AM audio bandwidth limited anyway, I could usually exceed the stations audio performance from the field and you couldn't tell we weren't using high performance lines. But that experience hasn't been limited to AM. I've been able, when lines were clean enough, to hit FM stations with audio wide enough, that the losses were ignorable. Hardly negligible, but certainly ignorable. And in at least two cases, better audio than was possible with Comrex, or with the POTS digital dialup systems out now.

It just depends on who's providing the line, and how it's routed.

BTW, equalized lines are being phased out. They're still available, but carriers are moving to make them prohibitively expensive to install and maintain, anymore, and carrier noise, which was never a problem before, is becoming a problem now. It's easier, more cost effective and requires less installer activity to drop in an ISDN line for broadcast. So carriers are really pushing that. Not that they're making it that much easier on the broadcaster. When I put in my ISDN link here at the house, I very nearly had to wire it for them.

When the Florians owned WNIB, Bill got tired of all the carrier noise, and administrative crap that went along with his equalized studio-transmitter lines, and had ATT install a second set of control loops for his remote transmitter control. Control loops are copper, unequalized, and are designed to carry control voltages, down to DC and control databus output. They're basically just twisted pair. And dramatically less cost than broadcast lines.

Bill got his own equalizers and set up his own equalized lines on the extra control loops and put his studio-transmitter audio there.

It was the sweetest sounding audio on the dial. Right up there with WFMT, but less limiting.

ATT threw a fit. Control loops are NOT for carrying program audio. Bill fought them on it. And never did return to ATT broadcast lines. He and Sonja eventually sold out to Bonneville for nearly a half a billion dollars.

Sometimes the bear gets you, sometimes bear steaks are so tasty at the end of a long ride.

490. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 14:32:05 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fa1n56$17uu$1@f04n12.cac.psu.edu>
Source record: 37304

Jay in the Mojave wrote:
> John Smith I wrote:
>> http://www.redherring.com/Home/22562
>>
>> JS
>
> Hello John and all:
>
> One of the things that I haven't seen covered about BPL, is the
> installation and maintenance costs involved, in a power grid system.
>
> We all know that when a system is modified for something that it wasn't
> designed for that problems will surface. I'll bet money that the power
> grid system modification and maintenance may be have a significant cost.
> That was not totally covered, or audited.

We've all heard the nightmare stories and seen the enforcement actions taken against Power companies that can't be bothered to fix a broken insulator, bad ground wire, noisy transformer, or whatever that is causing havoc to hams nearby. If they do put in BPL, it will be their very own customers who complain to them. Then they have less of a choice, assuming they want to keep their BPL customers.

And they still have to run the fiber. Why don't they just try selling fiber access? Somewhere somehow we got a popular misconception that there is some sort of magic box at the power generating station that supplies internet access to the world. It ain't so.

- 73 de Mike KB3EIA -

491. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 14:45:02 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fa1nte$1bso$1@f04n12.cac.psu.edu>
Source record: 37305

Christopher Cox wrote:
> John Smith I wrote:
>> Geoffrey S. Mendelson wrote:
>>
>> > ...
>>
>>> It was "your" choice, Google and their BPL, or Ham radio. Which did
>>> you decide?
>>>
>>> Geoff.
>>>
>>
>> When the sword challenged the rock, the sword won. When the gun
>> challenged the sword, the gun won. When the automobile challenged the
>> horse, the auto won. When the washing machine challenged the
>> washboard, the machine won. When tubes challenged the spark-gap
>> xmitter, the tube won. When penicillin challenged herbs, penicillin
>> won. When the birth control pill challenged the condom, the pill won.
>>
>> Now the internet challenges code tapping amateurs ...
>>
>> Regards,
>> JS
>
> This has nothing to do with the Internet or code tapping amateurs.
>
> It has to do with some intellectually devoid engineers challenging the
> reality of the Nyquist rate and placing a device on the only radio
> frequencys that can be naturally propagated through out the planet.

It is a political process more than an engineering one. The idea that you "just" plug into the wall socket for your internet is almost irresistible to people who don't actually know how things actually work.

Very few things "just" work.

> This group will be beaming porn wirelessly throughout the world, what an
> accomplishment. They should feel proud!

Oh, BPL will fail, either through pure technical flopping, or the marketplace moving on. None of the arguments for it hold water. My favorite is the argument that it will provide internet service for people in remote areas where they can't get service now. Presumably they don't have service because there isn't any fiber nearby, where other BB providers pick up their signals, and distribute them.

All they have to do is run the fiber to these underserved areas. (we all do know that BPL is a last mile delivery service don't we?) Of course that means there will be fiber in the area, so the other providers can come in and beat the pants off of BPL in terms of speed and reliability.

- 73 de Mike KB3EIA -

492. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 14:51:23 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fa1o9j$1bsq$1@f04n12.cac.psu.edu>
Source record: 37306

nm5k@wt.net wrote:
>
> When my henry 2k classic and yagi pointed at the power line challenges
> BPL...
> Hummmm, this could get ugly... No matter what mode I use. BPL is a two
> lane highway. I should be as much of a pest them to them, as them to
> me..

Your Henry and directional antenna would silence a pretty big area, MK.
QRP levels have been able to knock the signals out on occasion, and a
hundred watts in a mobile can keep a lot of people safe from porn.

Note that no intentional interference applies - all perfectly legal
Amateur radio use.

- 73 de Mike KB3EIA -

493. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 14:54:09 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fa1oeh$1bsq$2@f04n12.cac.psu.edu>
Source record: 37307

John Smith I wrote:
> Christopher Cox wrote:
>
> > ...
>> This has nothing to do with the Internet or code tapping amateurs.
>>
>> It has to do with some intellectually devoid engineers challenging the
>> reality of the Nyquist rate and placing a device on the only radio
>> frequencys that can be naturally propagated through out the planet.
>>
>> This group will be beaming porn wirelessly throughout the world, what
>> an accomplishment. They should feel proud!
>>
>>
>> Chris
>
> The old failed logic recycled one more time; go keep track of who had
> licenses before code was dropped ... eat your lotus blossoms--it always
> worked before ...

The idea that BPL cam about in order to punish Hams who like Morse code
is a new one.

- 73 de Mike KB3EIa -

494. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 15:06:36 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa1p65bkr1@news.albasani.net>
Source record: 37308

Michael Coslo wrote:

> ...
> The idea that BPL cam about in order to punish Hams who like Morse
> code is a new one.
>
> - 73 de Mike KB3EIa -

Now, there is the mindset which got us here in the first place, don't you get it?

Hams are just NOT important enough to justify punishment, they simply are holding onto a fraction of the public airwaves which can be placed to much better use ... get real.

JS

495. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 15:09:29 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa1pbhbkr2@news.albasani.net>
Source record: 37309

Michael Coslo wrote:

> ...
> Oh, BPL will fail, either through pure technical flopping, or the
> marketplace moving on. None of the arguments for it hold water. My
> ...

Could be ... these things have a way of working themselves out ... time will tell ... I wouldn't count on it failing though. I'd count on new technology being developed which makes it even more desirable, something shown by history as much more likely.

JS

496. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 15:10:59 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa1pecbkr3@news.albasani.net>
Source record: 37310

Michael Coslo wrote:

> ...
> Your Henry and directional antenna would silence a pretty big area,
> MK. QRP levels have been able to knock the signals out on occasion, and
> a hundred watts in a mobile can keep a lot of people safe from porn.
>
> Note that no intentional interference applies - all perfectly legal
> Amateur radio use.
>
> - 73 de Mike KB3EIA -

Frankly, I'd like to see it, would find the attempt(s) highly
entertaining. And, the solutions to such would just be icing on the cake!

JS

497. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 15:17:46 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <uUZwi.14141$B25.5043@news01.roc.ny>
Source record: 37311

John Smith I wrote:
> Michael Coslo wrote:
>
> > ...
>
>> The idea that BPL cam about in order to punish Hams who like Morse
>> code is a new one.
>>
>> - 73 de Mike KB3EIa -
>
>
> Now, there is the mindset which got us here in the first place, don't
> you get it?
>
> Hams are just NOT important enough to justify punishment, they simply
> are holding onto a fraction of the public airwaves which can be placed
> to much better use ... get real.

Define 'better.'

498. Re: 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 15:19:00 UTC
From: ricknj10@hotmail.com
Message-ID: <46c4699d.7362437@news.optonline.net>
Source record: 37312

I said:
>> I have a 3 element SteppIR. It is on a 16 ft boom.

The other Rick said:

>What kind of a mast or tower is it on, and what rotator are you using to
>turn it?

It's on a 72 ft US Tower crank-up, the medium sized tower, not the biggest one. And the rotator is the Yaesu G-1000SDX. No problems with either. Photos if you want them.
Incidentally, mine is shown on the SteppIR web page, showing me building it, with the tower tilted over, and in QST ads showing pine trees all around bent over from the wet snow but the SteppIR is clean. The snow did not accumulate on the slick fiberglass elements! Been up 3 years now - perfection.

Rick K2XT

499. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 15:19:35 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa1pufevv1@news.albasani.net>
Source record: 37313

Michael Coslo wrote:

> ...
> Your Henry and directional antenna would silence a pretty big area,
> MK. QRP levels have been able to knock the signals out on occasion, and
> a hundred watts in a mobile can keep a lot of people safe from porn.
>
> Note that no intentional interference applies - all perfectly legal
> Amateur radio use.
>
> - 73 de Mike KB3EIA -

Of course you realize, as BPL becomes of a major importance, attempts will be made to make the lines EMP hardened (most lines are now going underground in this attempt, as we speak), you linears will look as a matchstick held beside a 1,000,000 candle-power lamp--but then, you already knew that. You are simply in the cycle of denial/acceptance ...

JS

500. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 15:32:18 UTC
From: nm5k@wt.net
Message-ID: <1187278338.212054.298770@l22g2000prc.googlegroups.com>
Source record: 37314

On Aug 16, 9:21 am, John Smith I <assemblywiz...@gmail.com> wrote:

>
> You just don't get the power of digital do you? Or, the laws which will
> come ... however, confiscation of that ancient and moth ridden amp and
> the fine which will be imposed will be something sane men will wish to
> avoid ... I have a 5KW (never run over a calif kilo of input though :-)
>)russian amp, its' last days are in sight :-(
>
> JS

How would I get fined for pointing my antenna to Europe? It legal for
me to point my antenna to Europe, run an amp, and talk all day if
I want to.
I don't run 5 KW amps, calif kilo's, or other illegal activities as
you
admit to doing. So I would expect you to get a fine before I would.
BTW, the amp is an 81 model. Yes, fairly ancient, but it has no
moths living in it. As Mike points out, I probably wouldn't even need
it to keep BPL on hold. My amp will only do about 1400w max, so
I have no fear of breaking any power level rules.
Just my 100w radio into the yagi, aimed at Europe would probably
do the job.
I have this vision in my mind of a bunch of BPL techs jabbering
away like the guy in the movie "Cape Fear" as he's drowning
in the river.. Abadabajumbalikearedoka, aubadbababababdbaba.
LOL...Kills me to ponder the scenario..
So while you are moaning and groaning about the problem, I will
be taking care of it myself in an orderly military manner.
Any problems they have will be due to their own shoddy system
design and line leakage which is a two way street I remind..
Not my gear. So they won't have a leg to stand on if they or even
you complain to the FCC.
MK

501. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 15:47:02 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa1rhu$j30$1@news.albasani.net>
Source record: 37315

nm5k@wt.net wrote:

> ...

Well, in my neighborhood/city, you could not get into any trouble. All lines are underground. What you cite is a moot point.

Except for exceeding safe rf levels, I cannot see a problem.

Anyway, BPL is best suited for remote areas (your neighbor is over in the next 40 acres), the new 700Mhz would be far more suited to towns/cities.

Isn't the real excitement watching this new technology develop, with solutions found "on the fly?"

JS

502. get kelp

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 15:50:46 UTC
From: Mark@TayleorRobesin.org
Message-ID: <6is8c3955dun54dcob10rhckujv4lp3ldd@4ax.com>
Source record: 37316
Cross-posted to:
rec.radio.amateur.policy,alt.support.child-protective-services,alt.autos.mini,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

On Thu, 16 Aug 2007 01:38:22 -0500, N2QSX <N2QSX@n3qsx.net> wrote:

>

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

503. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 15:58:26 UTC
From: Stephanie Weil <stephanienyc@gmail.com>
Message-ID: <1187279906.198561.327420@d55g2000hsg.googlegroups.com>
Source record: 37317
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

On Aug 16, 10:29 am, D Peter Maus <DPeterM...@worldnet.att.net> wrote:
> It's easier, more cost effective and
> requires less installer activity to drop in an ISDN line for broadcast.
> So carriers are really pushing that. Not that they're making it that
> much easier on the broadcaster.

Wasn't there a rumor a couple years back that the phone companies are
slowly discontinuing ISDN service? Or is that only for residential
services as opposed to radio stations?

Stephanie Weil
New York City, USA

504. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 16:11:40 UTC
From: D Peter Maus <DPeterMaus@worldnet.att.net>
Message-ID: <0H_wi.433989$p47.149701@bgtnsc04-news.ops.worldnet.att.net>
Source record: 37318
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

Stephanie Weil wrote:
> On Aug 16, 10:29 am, D Peter Maus <DPeterM...@worldnet.att.net> wrote:
>> It's easier, more cost effective and
>> requires less installer activity to drop in an ISDN line for broadcast.
>> So carriers are really pushing that. Not that they're making it that
>> much easier on the broadcaster.
>
> Wasn't there a rumor a couple years back that the phone companies are
> slowly discontinuing ISDN service? Or is that only for residential
> services as opposed to radio stations?
>
> Stephanie Weil
> New York City, USA
>
>

They don't want to do ISDN internet services, anymore. But I'm using
ISDN as a studio-studio link. So far, no one has suggested to me that
it's not going to continue.

505. Cushcraft A4 Owners

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 16:15:12 UTC
From: "R. Scott" <lintardspamtrap@scotts-home.net>
Message-ID: <JMvJtC.5K9@news.boeing.com>
Source record: 37320

Question

I assembled it per the instructions for the band parts I wanted. I triple measured and Up she went.

I'm really Low (as in instead of 14.150 its down around 13.950)

And I just noticed yesterday looking up that the director seemed a bit longer than the driven.

And I know as per the first line, I assembled it to the tee for per the instruction sheet.

Suggestions ?

506. Re: A more rational approach -- how I would like to change the cell...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 16:23:26 UTC
From: richardharrison@webtv.net
Message-ID: <24635-46C479FE-252@storefull-3251.bay.webtv.net>
Source record: 37319

John Smith 1 reported Radium to write:
"Analog cell phones shoild stop using FM and should start using AM at whatever practical radio frequency available."

Tune the FM band. Recovered audio is all about the same loudness. Tune across the AM band. Even with stromg AVC action, loudness varies with signal strength.

Loudness independent of carrier signal strength is a great advantage of FM. Amateur FM repeaters allow hand helds with a few milliwatts output sound about as loud as a base station with maximum allowed power output.

Imagine a cell phone in all the disadvantaged locations it encounteres as it switches from repeater to repeater along its route. Loudness would be nightmareish. Radium`s proposal won`t be satisfactory with analog phones.

Best regards, Richard Harrison, KB5WZI

507. Re: Cushcraft A4 Owners

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 17:00:10 UTC
From: nm5k@wt.net
Message-ID: <1187283610.469511.25800@z24g2000prh.googlegroups.com>
Source record: 37321

On Aug 16, 11:15 am, "R. Scott" <lintardspamt...@scotts-home.net>
wrote:
> Question
>
> I assembled it per the instructions for the band parts I wanted. I triple
> measured and Up she went.
>
> I'm really Low (as in instead of 14.150 its down around 13.950)
>
> And I just noticed yesterday looking up that the director seemed a bit
> longer than the driven.
>
> And I know as per the first line, I assembled it to the tee for per the
> instruction sheet.
>
> Suggestions ?

Dunno, if the director is longer than the DE, something ain't right..
Maybe a loose tube pulled out a bit or something.. ??
The director should be a little over an inch shorter than the DE.
Could be a visual illusion too though.. You will probably have to
yank it back down and re-measure. :/
MK

508. Re: Cellular yagi help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 17:37:25 UTC
From: You <You@shadow.orgs>
Message-ID: <You-E5B855.09381216082007@netnews.worldnet.att.net>
Source record: 37322
Cross-posted to: alt.cellular-phone-tech,rec.radio.amateur.antenna

In article <1187227808.812721.171450@i13g2000prf.googlegroups.com>,
szilagyic <chris@groupinfo.com> wrote:

> On Jul 29, 8:43 pm, "J. Mc Laughlin" <j...@power-net.net> wrote:
> > Dear Chris:
> >
> > Others have pointed out the expected large loss in the RG58 type coax
> > and the difficulty in designing an antenna to cover the two bands that you
> > mentioned.
> >
> > You may find the FCC ID number of your phone/card and go to the FCC's
> > site to learn the band or bands that your communication device is able to
> > operate on. It is possible that the device is only able to operate on one
> > band. I have heard of cases where a device was able to operate on more than
> > one band but needed the operator to execute an instruction to cause the
> > device to find the best band. (In other words, apparently some devices do
> > not ascertain continually what band has the best SNR.)
> >
> > When you have changed the coax, do report back.
> >
> > Regards, Mac N8TT
> >
> > --
> > J. Mc Laughlin; Michigan U.S.A.
> > Home: J...@Power-Net.Net
> >
>
>
> Thank you very much for all of the feedback in this thread. I have
> finally swapped out the original RG58U coax with LMR-400, and the
> difference is phenominal. At our test location, we were getting
> around 40% signal with the RG58U hooked to our yagi. When I swapped
> out the RG58U cable with the LMR-400 cable, we got all the way to
> 100%! So it appears our yagi is working good, too, at whatever
> frequency we are running at here.
>
> Thanks again for all of the help ....
> --
> Chris
>

Isn't technology wonderfull.........

509. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 18:01:59 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fa23en$p1m$1@f04n12.cac.psu.edu>
Source record: 37323

John Smith I wrote:
> Michael Coslo wrote:
>
> > ...
>> The idea that BPL cam about in order to punish Hams who like Morse
>> code is a new one.
>>
>> - 73 de Mike KB3EIa -
>
> Now, there is the mindset which got us here in the first place, don't
> you get it?

Actually no, I don't. A side effect of BPL might be to harm the bands that amateurs operate on, but I can't even imagine the people who push this merde having a thought of inconveniencing Morse code lovers.

> Hams are just NOT important enough to justify punishment, they simply
> are holding onto a fraction of the public airwaves which can be placed
> to much better use ... get real.

HF is an unruly beast, and not well suited to any kind of distance limiting needs. Years ago there were wireless home phones around 11 meters. They didn't work too well. A large part of that was HF type problems of static, big antennas and propagation effects.

Anyone who wants to work in HF, especially digitally, will have to reckon with those effects. The political types who promote use of HF for this seldom understand that.

- 73 de Mike KB3EIA -

510. Re: 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 18:18:16 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.16.18.18.15.76125@from.qrz.com>
Source record: 37324

On Wed, 15 Aug 2007 15:03:40 -0700, Richard Clark wrote:

> We could all pitch in innumerable suggestions to a variety of "won't
> works" from you, and will it move you an inch away from the SteppIR?

Of course. I don't know what makes you think I'm set on the SteppIR. I only just started considering it two days ago. And a thousand bucks really is a lot of money to me... might not be to some people.

> Clearly you have made a choice and this is more about validation,

Nope, far from it.

> If you cannot adjust the distance between elements - what more is to be
> said? It sucks?

If it sucks, then yea, that's what needs to be said.

"Probably works better than a dipole" isn't good enough to spend a big one on. As for being resonant and rotatable, that's not worth a thousand bucks (to me) either.

> To this point, you have through various threads identified you need to
> be frequency agile and quick. Myself, I haven't seen many choices you
> have lead yourself toward that really qualify in that regard - so I am
> suspicious of those qualifiers. The SteppIR certainly doesn't even come
> close to the span of frequency you've identified (2 MHz to 20MHz), and
> you are beginning to accumulate quite an antenna farm as it is.

That would be true if I had actually put any of them up. So far I have two inverted vees, one dual-band NVIS dipole, and a 144/220/440 vertical.

I have more than one need. The general need is to be able to operate on a list of CAP and MARS frequencies from 2 to 24 MHz. That one doesn't need any gain or directivity, or any specific level of power (I routinely participate in CAP and MARS nets with my inverted vee and 5 watts out of my FT-817). I'm considering the T2FD only because then I can load all the needed frequencies into the radio and put it on scan, and if someone I need to talk to shows up on one of the channels I can pick up the mic and hope for the best. But I'm not about to spend $300 for one (sorry if that sounds like I'm "hedging away"... whatever that means...).

The more specialized need requires higher power and a rotatable, directional antenna, in the frequency range from something below 20 meters up to 24 MHz, in order to be able to offer a specific MARS service. If you're in MARS you know which service I'm referring to, and if you're not, for some obscure and relatively bizarre reason I'm not allowed to say, but it's an easy guess. In any case, I have been informed that I probably

won't be able to participate with a wire antenna and 150 watts, so since it appears that's their story and they're stickin' to it, I'm looking for some alternatives that don't involve buying a whole separate antenna just for MARS.

> It would seem you have to come to terms with space restrictions

Not sure where that impression came from, either. Actually I am quite fortunate regarding space, with two acres of land arranged in a square 300 ft on a side, and lots of tall pine trees. I could put up a pair of the biggest SteppIRs, stacked, on a 150-foot tower but there will never (ever) be money available to do stuff like that, so I have to settle for what I already have, or can afford... and what I have is several random sections of Rohn 25G so that's what I put up.

> You want to try again?

Thanks, but I guess not. I'm doing my best already, to gather information and make a decision I can afford and will work reasonably efficiently for me. I'm sorry if you find my questions unclear or "hedging" or whatever but think I've been pretty clear on my questions up to now, and I've learned a lot from reading you guys.

The fact is I have more than one question (surprise!), each of which has been formulated meticulously enough, and each of which serves a different though related need. This latest one is the simple and meticulously-crafted question that says, simply, "Can a 2-element beam work efficiently with only 0.07 wl spacing between elements?". The related question, which I think is equally clear, was "Any of you guys have the SteppIR 2-element and if so, what do you think of it?".

I can't think of a way to meticulously craft either of those questions that will yield a self-contained answer on its own.

511. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 18:29:19 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <C2E9E58F.73A63%dbowey@comcast.net>
Source record: 37325
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

```
On 8/16/07 7:29 AM, in article
hbZwi.433778$p47.239378@bgtnsc04-news.ops.worldnet.att.net, "D Peter Maus"
<DPeterMaus@worldnet.att.net> wrote:

> Brenda Ann wrote:
>> "John Navas" <spamfilter1@navasgroup.com> wrote in message
>> news:0cq7c3def3f3rdpt56urvgf6c3ntekbk28@4ax.com...
>>> On Thu, 19 Jul 2007 18:43:58 -0700, Don Bowey <dbowey@comcast.net> wrote
>>> in <C2C5616E.700B1%dbowey@comcast.net>:
>>>
>>>> On 7/19/07 4:42 PM, in article 1mtv93ticddur8rq3tghsra57n9508mci0@4ax.com,
>>>> "John Navas" <spamfilter1@navasgroup.com> wrote:
>>>>
>>>>> On Thu, 19 Jul 2007 14:45:00 GMT, jimp@specsol.spam.sux.com wrote in
>>>>> <tp94n4-17l.ln1@mail.specsol.com>:
>>>>>
>>>>>> In rec.radio.amateur.antenna Radium <glucegen1@gmail.com> wrote:
>>>>>>> Digital cell phones should stop using the compression they use and
>>>>>>> start using monaural WMA compression with a CBR of 20 kbps or less and
>>>>>>> a sample rate of at least 44.1 KHz. In addition, the following must
>>>>>>> also apply:
>>>>>> The audio bandwidth of the phone system is about 3 KHz.
>>>>> Actually more like 10 KHz.
>>>> If he is commenting on the bandwidth of a message network channel/circuit,
>>>> including cellular, it is about 3 kHz.
>>> Audio. Suggest you read more carefully.
>>>
>>> --
>>> Best regards, FAQ FOR CINGULAR WIRELESS:
>>> John Navas <http://en.wikibooks.org/wiki/Cingular_Wireless_FAQ>
>>
>> POTS phone lines are very limited. IIRC from my work with those systems,
>> about 300-3600 Hz. Strictly human voice range, not meant for hi-fi. Special
>> lines are still available for hi-fi use as audio STL's.
>>
>>
>
>
>
> I engineered a remote in Chicago a number of years ago, and the
> client wouldn't spring for ISDN, or equalized lines. ATT provided a POTS
> line and we got 8k analog audio out of it. Then again, we were next to
```

> an ATT store. Similar performance was observed at my condo in Heather
> Ridge. Here at the house, not two miles away, I'm lucky to hit 14.4
> modem speeds, and 3k audio on a good day with my POTS line.
>
> Guaranteed performance, you're right, is only 300 to 3600Hz,

I can't think of even one US Telco that would (or could) guarantee that for
a POTS line.

> and
> 14.4k modem speed. But real performance varies from company to company,
> CO to CO, line to line. And surprisingly good audio and high modem
> speeds, are possible with POTS technology. The instruments, themselves,
> are bandwidth limited. But the lines are often, but not always, much
> wider than the instrument. That's why, when addressing the phone with a
> hybrid, or repeating coil, directly, I have always been able to get
> passable audio on a POTS line. With AM audio bandwidth limited anyway, I
> could usually exceed the stations audio performance from the field and
> you couldn't tell we weren't using high performance lines. But that
> experience hasn't been limited to AM. I've been able, when lines were
> clean enough, to hit FM stations with audio wide enough, that the losses
> were ignorable. Hardly negligible, but certainly ignorable. And in at
> least two cases, better audio than was possible with Comrex, or with the
> POTS digital dialup systems out now.
>
> It just depends on who's providing the line, and how it's routed.
>
> BTW, equalized lines are being phased out. They're still available,
> but carriers are moving to make them prohibitively expensive to install
> and maintain, anymore, and carrier noise, which was never a problem
> before, is becoming a problem now. It's easier, more cost effective and
> requires less installer activity to drop in an ISDN line for broadcast.
> So carriers are really pushing that. Not that they're making it that
> much easier on the broadcaster. When I put in my ISDN link here at the
> house, I very nearly had to wire it for them.
>
> When the Florians owned WNIB, Bill got tired of all the carrier
> noise, and administrative crap that went along with his equalized
> studio-transmitter lines, and had ATT install a second set of control
> loops for his remote transmitter control. Control loops are copper,
> unequalized, and are designed to carry control voltages, down to DC and
> control databus output. They're basically just twisted pair. And
> dramatically less cost than broadcast lines.
>
> Bill got his own equalizers and set up his own equalized lines on the
> extra control loops and put his studio-transmitter audio there.
>
> It was the sweetest sounding audio on the dial. Right up there with
> WFMT, but less limiting.
>
> ATT threw a fit. Control loops are NOT for carrying program audio.

> Bill fought them on it. And never did return to ATT broadcast lines. He
> and Sonja eventually sold out to Bonneville for nearly a half a billion
> dollars.

AT&T didn't sell local channels. What Telco are you calling AT&T?

>
> Sometimes the bear gets you, sometimes bear steaks are so tasty at
> the end of a long ride.
>
>
>
>
>
>
>
>

512. Re: my knew blog

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 19:04:58 UTC
From: an old fiend <kbprqueer@punce.net>
Message-ID: <46c493d9$0$28429$88260bb3@free.teranews.com>
Source record: 37326
Cross-posted to:
rec.radio.amateur.policy,alt.support.child-protective-services,alt.autos.mini,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

"N2QSX" <N2QSX@n3qsx.net> wrote in message
news:46c3e4a0$0$1099$88260bb3@free.teranews.com...
> ron lets gav plonk in his mouth
>
indeed ron let eveywon due taht

- -
no good indeed goes unpunced

> Ron wrote:
>> plonk
>>
>> "an old fiend" <kbprqueer@punce.net> wrote in message
>> news:46c34d7d$0$16386$88260bb3@free.teranews.com...
>>> it about woger
>>>
>>> http://whywogersucks.blogspot.com/
>>>
>>>
>>>
>>>
>>> --
>>> Posted via a free Usenet account from http://www.teranews.com
>>>
>>
>>
>>
>
> --
> Posted via a free Usenet account from http://www.teranews.com
>

--
Posted via a free Usenet account from http://www.teranews.com

513. get kelp it is green

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 19:21:14 UTC
From: Mark@TayleorRobesin.org
Message-ID: <ms89c39pbqa69614f3rifnbcg9c6p2vc9f@4ax.com>
Source record: 37327
Cross-posted to:
rec.radio.amateur.policy,alt.support.child-protective-services,alt.autos.mini,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

On Thu, 16 Aug 2007 15:04:58 -0400, "an old fiend"
<kbprqueer@punce.net> wrote:

>
>"N2QSX" <N2QSX@n3qsx.net> wrote in message
>news:46c3e4a0$0$1099$88260bb3@free.teranews.com...
>> ron lets gav plonk in his mouth
>>
>indeed ron let eveywon due taht
>

get a life of your own

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

514. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 19:36:22 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa28vuljg1@news.albasani.net>
Source record: 37328

Michael Coslo wrote:

> ...
> Anyone who wants to work in HF, especially digitally, will have to
> reckon with those effects. The political types who promote use of HF for
> this seldom understand that.
>
> - 73 de Mike KB3EIA -

Actually, no, not everyone has to study HF to see if your argument holds
water or not.

YOU just need to see a BPL modem at work--it'll blow away any doubts you
may have as to it being suited to HS data xfer over power-lines ...

JS

515. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 19:41:21 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa2999ljg2@news.albasani.net>
Source record: 37329

nm5k@wt.net wrote:

Yeah, the image you attempted to paint in my mind of a toothless old "HF-RF-Terrorist" with a measly KW+ amp doing any sort of meaningful disruption of internet communications is, to say the least, highly comic ... however, you might succeed in enraging your close neighbors into killing you.

Regards,
JS

516. Re: 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 19:46:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1l59c359ig5tar6jc1uvdj1euc2dolo85l@4ax.com>
Source record: 37331

On Thu, 16 Aug 2007 14:18:16 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>"Probably works better than a dipole" isn't good enough to spend a big one
>on. As for being resonant and rotatable, that's not worth a thousand
>bucks (to me) either.

Hi Rick,

This is what I mean by meticulous (in any formulation): What "is" good
enough? One could fill a book with what is wrong with a suggestion
and we would be no nearer an answer.

>> you are beginning to accumulate quite an antenna farm as it is.
>
>That would be true if I had actually put any of them up. So far I have
>two inverted vees, one dual-band NVIS dipole, and a 144/220/440 vertical.

OK, I suppose that's another way of saying having four antennas
covering up to 6 bands isn't enough - that is why we have our own
newsgroup, because many share that feeling.

>I have more than one need. The general need is to be able to operate on a
>list of CAP and MARS frequencies from 2 to 24 MHz. That one doesn't need
>any gain or directivity, or any specific level of power (I routinely
>participate in CAP and MARS nets with my inverted vee and 5 watts out of
>my FT-817). I'm considering the T2FD only because then I can load all the
>needed frequencies into the radio and put it on scan, and if someone I
>need to talk to shows up on one of the channels I can pick up the mic and
>hope for the best. But I'm not about to spend $300 for one (sorry if that
>sounds like I'm "hedging away"... whatever that means...).

You have a need, but you are not going to spend $300 to fill it.
Again, you say what is wrong, but not what is right. Will you spend
$299? This threatens to call this portion of the game 300 questions.
So to practice the engineering form of Jeopardy: "in the form of a
question respond to 'I might spend more than $150 but less than
$300'?" (answer: "What is a binary search?" Thank you Don Pardo.)

Spending aside, a lot of performance be can be built for less if you
discount the value of your time (that is why they call it a hobby).
The trouble I have here is that you don't want to spend money (neither
would I), but then you ask about spendy items like the T2FD or
SteppIR. Say What?

I see the 2 to 24 MHz requirement trotted out, and strictly speaking
it is exceedingly obvious you won't buy that solution on the open

market for $300 or less (unless it is a bribe to a Government official
that has the power to surplus gear).

So it stands to reason you would have to build it. That can be done
to the limitations you offer above (and probably exceeding the
performance of the T2FD).

Doubling the dimensions of:
http://home.comcast.net/~kb7qhc/antennas/verticals/Cage/cage.htm
would satisfy 3/4ths of your spectrum requirement and the ambitious
amateur could erect it without too much care for precision or cost. If
you were to come back to me with a negative reply ("it won't....")
what is one to do?

>The more specialized need requires higher power and a rotatable,
>directional antenna, in the frequency range from something below 20 meters

Tell me that you want to spend less than $300 for this and we can all
have a chuckle. About the only thing that qualifies was described as
having a Gaussian Array (no suggested retail price - and for good
reason).

>I have been informed that I probably
>won't be able to participate with a wire antenna and 150 watts, so since
>it appears that's their story and they're stickin' to it, I'm looking for
>some alternatives that don't involve buying a whole separate antenna just
>for MARS.

I hope you didn't hear that story here, it qualifies as fiction in the
library. There are wire solutions that are steerable, and certainly
power is not an issue (especially if you were going to pour it into a
T2FD).

>> You want to try again?
>
>Thanks, but I guess not. I'm doing my best already, to gather information
>and make a decision I can afford and will work reasonably efficiently for
>me. I'm sorry if you find my questions unclear or "hedging" or whatever
>but think I've been pretty clear on my questions up to now, and I've
>learned a lot from reading you guys.

Your questions tend toward seeking validation:
"Will X work for Y?"

To which some responses offer
"Um, yes, but why would you want to do that?"

"Because I don't what Z."

"OK, X for Y without Z can be found with model A."

"Model A will do, but it doesn't give me B."

"OK, X for Y without Z but with B."

This can go on for a long time.

>The fact is I have more than one question (surprise!), each of which has
>been formulated meticulously enough, and each of which serves a different
>though related need.

We are up to model XY(/Z)+B+specialC, then.

> This latest one is the simple and
>meticulously-crafted question that says, simply, "Can a 2-element beam
>work efficiently with only 0.07 wl spacing between elements?".

The W8JK works quite well at 0.10 wl spacing between elements and has
been around for more than 50 years. How much can squeezing it to 0.07
spacing hurt? The free version of EZNEC can answer that in less than
a minute (none).

If you build it wrong, then the answer is no, it cannot work
efficiently.

You can even buy one that won't work for the same reason - you as a
builder of the package of bits and pieces that arrives UPS. In this
world of free competition and lead painted toys for children, you can
also buy one that won't work - irrespective of your construction
talents.

Being meticulous about "efficient" would have you expressing what loss
is allowable. By inference to your tendency to select a T2FD (loss in
the ballpark of at least 3dB), then yes (and with proper design and
construction), 0.07 wl spacing between elements is efficient (even if
it loses 1.8dB along the way in getting there). If 1.8dB is too much
loss (another negative reaction), then you weren't very meticulous at
all. On the other hand, it would serve you well to know that doing
better would probably cost beaucoup bucks more than $300 (or even a
grand).

>The
>related question, which I think is equally clear, was "Any of you guys
>have the SteppIR 2-element and if so, what do you think of it?".
>
>I can't think of a way to meticulously craft either of those questions
>that will yield a self-contained answer on its own.

Thus this newsgroup has a benefit - at least from my habit of
rhetorical excess. (a tip o' the hat to Myles for flowers.)

Your one-question-at-a-time is easy to respond to and satisfactory in
most respects, but when you combine the separate answers into this
goal of a Grand Unification Theory of MARS/CAP operation, it is like
watching someone on rubber crutches. I cringe, but laughing is one of
those involuntary reflexes.

73's
Richard Clark, KB7QHC

517. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 19:47:38 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
Message-ID: <46c4a92d$0$3853$4c368faf@roadrunner.com>
Source record: 37330

John Smith I wrote:
> Christopher Cox wrote:
>
> > ...
>
>> This has nothing to do with the Internet or code tapping amateurs.
>>
>> It has to do with some intellectually devoid engineers challenging the
>> reality of the Nyquist rate and placing a device on the only radio
>> frequencys that can be naturally propagated through out the planet.
>>
>> This group will be beaming porn wirelessly throughout the world, what
>> an accomplishment. They should feel proud!
>>
>>
>> Chris
>
>
> The old failed logic recycled one more time; go keep track of who had
> licenses before code was dropped ... eat your lotus blossoms--it always
> worked before ...
>
> JS

John,

You are making some poor assumptions. I do not frequent the radio HF spectrum. While I have operated CW before, it has been years ago, largely to gain privileges to HF. I make my living in the Voip/Data world and would like to push broadband consumption like a utility.

That being said, I liken BPL to pee'ing into a stream. While I might not get my drinking water from it, someone or thing probably does. Just because BPL is not polluting spectrum I might be using today does not mean its not polluting someone else. Additionally, BPL's maximum data rate of 2 Mbps makes it late coming and soon not even considered broadband.

I do not understand why you would fight for something you probably would not even want in the future. Lets lay down some fiber, or at least twisted pair.

The facts are old, arguments for BPL vary because of their faulty logic, not the other way around.

Chris

518. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 19:59:26 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa2ab6ljg4@news.albasani.net>
Source record: 37232

Christopher Cox wrote:

> ...

Your ideas are great, IF, and that is a big IF, those lines are open to cheap access by all and available for use by ALL devices (basically the cost of repair/maintain). Otherwise BPL should stand vanguard and be used to remove control from phone companies/BIG_MONEY ...

Regards,
JS

519. Re: my knew blog

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 20:58:47 UTC
From: an old fiend <kbprqueer@punce.net>
Message-ID: <46c4ae72$0$16314$88260bb3@free.teranews.com>
Source record: 37233
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

"Ron" <apositiveplace@netscape.net> wrote in message
news:U5Pwi.102758$g86.38213@newsfe14.lga...
> plonk
>
>
Roger made this won about about hisself.

http://whywogersucks.blogspot.com/

--
no good indeed goes unpunced

> "an old fiend" <kbprqueer@punce.net> wrote in message
> news:46c34d7d$0$16386$88260bb3@free.teranews.com...
>>
>> it about woger
>>
>> http://whywogersucks.blogspot.com/
>>
>>
>>
>>
>> --
>> Posted via a free Usenet account from http://www.teranews.com
>>
>
>
>

--
Posted via a free Usenet account from http://www.teranews.com

520. Re: Ham license Archive

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 22:13:09 UTC
From: William O'Hara <whoohara@yahoo.com>
Message-ID: <Xns998EB95CFDBA2KB1IUB223223n1eyLOCK@216.196.97.136>
Source record: 37234

Scott <acepilot@bloomer.net> wrote in
news:TaGdnQTvWoojhQ_bnZ2dnUVZ_u-unZ2d@bright.net:

As I actually volunteer as a VE I can tell you the being in the book is
sufficient.

Most of them can't even find the old books!

>>>I don't think a callbook listing would be acceptable "proof" for the
>>>FCC to give him credit for having passed the code test in the past.
>>>But, again, since no code test is required anymore, he can simply
>>>re-test for any class license and request his old call as a vanity
>>>callsign.
>>>
>>>Scott
>>>N0EDV
>>
>>
>>
>>
>

--

William O'Hara
www.N1ey.com - Amateur Radio and Railfan Blog
www.yahoogroups.com/group/illinoiscentral - premier discussion list re:
ICRR

521. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 22:37:08 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns998E9EE27C452doldridgsprintca@64.59.135.159>
Source record: 37235

John Smith I <assemblywizard@gmail.com> wrote in news:fa0lr6$o3q$1
@news.albasani.net:

> Geoffrey S. Mendelson wrote:
>
> > ...
>> It was "your" choice, Google and their BPL, or Ham radio.
>> Which did you decide?
>>
>> Geoff.
>>
>
> When the sword challenged the rock, the sword won. When the gun
> challenged the sword, the gun won. When the automobile challenged the
> horse, the auto won. When the washing machine challenged the
washboard,
> the machine won. When tubes challenged the spark-gap xmitter, the tube
> won. When penicillin challenged herbs, penicillin won. When the birth
> control pill challenged the condom, the pill won.
>
> Now the internet challenges code tapping amateurs ...

Rocks break swords. Any system that leaks RF in one direction will leak
it both ways.

--
Dave Oldridge+
ICQ 1800667

522. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 22:40:06 UTC
From: D Peter Maus <DPeterMaus@worldnet.att.net>
Message-ID: <an4xi.435488$p47.253819@bgtnsc04-news.ops.worldnet.att.net>
Source record: 37236
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

```
Don Bowey wrote:
> On 8/16/07 7:29 AM, in article
> hbZwi.433778$p47.239378@bgtnsc04-news.ops.worldnet.att.net, "D Peter Maus"
> <DPeterMaus@worldnet.att.net> wrote:
>
>> Brenda Ann wrote:
>>> "John Navas" <spamfilter1@navasgroup.com> wrote in message
>>> news:0cq7c3def3f3rdpt56urvgf6c3ntekbk28@4ax.com...
>>>> On Thu, 19 Jul 2007 18:43:58 -0700, Don Bowey <dbowey@comcast.net> wrote
>>>> in <C2C5616E.700B1%dbowey@comcast.net>:
>>>>
>>>>> On 7/19/07 4:42 PM, in article 1mtv93ticddur8rq3tghsra57n9508mci0@4ax.com,
>>>>> "John Navas" <spamfilter1@navasgroup.com> wrote:
>>>>>
>>>>>> On Thu, 19 Jul 2007 14:45:00 GMT, jimp@specsol.spam.sux.com wrote in
>>>>>> <tp94n4-17l.ln1@mail.specsol.com>:
>>>>>>
>>>>>>> In rec.radio.amateur.antenna Radium <glucegen1@gmail.com> wrote:
>>>>>>>> Digital cell phones should stop using the compression they use and
>>>>>>>> start using monaural WMA compression with a CBR of 20 kbps or less and
>>>>>>>> a sample rate of at least 44.1 KHz. In addition, the following must
>>>>>>>> also apply:
>>>>>>> The audio bandwidth of the phone system is about 3 KHz.
>>>>>> Actually more like 10 KHz.
>>>>> If he is commenting on the bandwidth of a message network channel/circuit,
>>>>> including cellular, it is about 3 kHz.
>>>> Audio. Suggest you read more carefully.
>>>>
>>>> --
>>>> Best regards, FAQ FOR CINGULAR WIRELESS:
>>>> John Navas <http://en.wikibooks.org/wiki/Cingular_Wireless_FAQ>
>>> POTS phone lines are very limited. IIRC from my work with those systems,
>>> about 300-3600 Hz. Strictly human voice range, not meant for hi-fi. Special
>>> lines are still available for hi-fi use as audio STL's.
>>>
>>>
>>
>>
>> I engineered a remote in Chicago a number of years ago, and the
>> client wouldn't spring for ISDN, or equalized lines. ATT provided a POTS
>> line and we got 8k analog audio out of it. Then again, we were next to
>> an ATT store. Similar performance was observed at my condo in Heather
```

>> Ridge. Here at the house, not two miles away, I'm lucky to hit 14.4
>> modem speeds, and 3k audio on a good day with my POTS line.
>>
>> Guaranteed performance, you're right, is only 300 to 3600Hz,
>
> I can't think of even one US Telco that would (or could) guarantee that for
> a POTS line.
>

ATT does. So does Verizon. And GTE,...at least before they became
Sprint. If you don't meet those figures, you can complain. They'll move
on it. It's part of the tariff structure. I spent a number of years at
working with Telcos on just this matter.

>> and
>> 14.4k modem speed. But real performance varies from company to company,
>> CO to CO, line to line. And surprisingly good audio and high modem
>> speeds, are possible with POTS technology. The instruments, themselves,
>> are bandwidth limited. But the lines are often, but not always, much
>> wider than the instrument. That's why, when addressing the phone with a
>> hybrid, or repeating coil, directly, I have always been able to get
>> passable audio on a POTS line. With AM audio bandwidth limited anyway, I
>> could usually exceed the stations audio performance from the field and
>> you couldn't tell we weren't using high performance lines. But that
>> experience hasn't been limited to AM. I've been able, when lines were
>> clean enough, to hit FM stations with audio wide enough, that the losses
>> were ignorable. Hardly negligible, but certainly ignorable. And in at
>> least two cases, better audio than was possible with Comrex, or with the
>> POTS digital dialup systems out now.
>>
>> It just depends on who's providing the line, and how it's routed.
>>
>> BTW, equalized lines are being phased out. They're still available,
>> but carriers are moving to make them prohibitively expensive to install
>> and maintain, anymore, and carrier noise, which was never a problem
>> before, is becoming a problem now. It's easier, more cost effective and
>> requires less installer activity to drop in an ISDN line for broadcast.
>> So carriers are really pushing that. Not that they're making it that
>> much easier on the broadcaster. When I put in my ISDN link here at the
>> house, I very nearly had to wire it for them.
>>
>> When the Florians owned WNIB, Bill got tired of all the carrier
>> noise, and administrative crap that went along with his equalized
>> studio-transmitter lines, and had ATT install a second set of control
>> loops for his remote transmitter control. Control loops are copper,
>> unequalized, and are designed to carry control voltages, down to DC and
>> control databus output. They're basically just twisted pair. And
>> dramatically less cost than broadcast lines.
>>
>> Bill got his own equalizers and set up his own equalized lines on the
>> extra control loops and put his studio-transmitter audio there.

>>
>> It was the sweetest sounding audio on the dial. Right up there with
>> WFMT, but less limiting.
>>
>> ATT threw a fit. Control loops are NOT for carrying program audio.
>> Bill fought them on it. And never did return to ATT broadcast lines. He
>> and Sonja eventually sold out to Bonneville for nearly a half a billion
>> dollars.
>
> AT&T didn't sell local channels. What Telco are you calling AT&T?
>
>
>> Sometimes the bear gets you, sometimes bear steaks are so tasty at
>> the end of a long ride.
>>
>>
>>
>>
>>
>>
>>
>>
>

523. Re: 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 22:54:28 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.16.22.54.26.849221@from.qrz.com>
Source record: 37237

On Thu, 16 Aug 2007 12:46:26 -0700, Richard Clark wrote:

> You have a need, but you are not going to spend $300 to fill it. Again,
> you say what is wrong, but not what is right. Will you spend $299?

I will investigate collecting together the parts from hither and yon and building one myself, for less (sorry, can't define "less" but, like pornography, I'll know it when I see it).

That was the objective behind whatever my original question was that had to do with T2FDs. I'm pretty sure the original question had to do with where I can buy suitable terminating resistors and bizarre-ratio baluns, and which of the various and assorted configurations (390 ohm resistor and 4:1 balun vs some higher resistance and ever more obscure impedance-ratio baluns) is "best" (which is to say, least "bad"). But if there was other stuff in my original question, please do me a favor and don't toss it up in my face, OK? Answers to those questions (which I got, both here and elsewhere) are sufficient for now.

>> The more specialized need requires higher power and a rotatable,
>> directional antenna, in the frequency range from something below 20
>> meters
>
> Tell me that you want to spend less than $300 for this and we can all
> have a chuckle.

Come on, Richard, can't you see the apples-to-oranges comparison?

I'm willing to spend $1000, if I have to, on a two element beam that claims to work efficiently from 14 to 24 MHz (and beyond), IF it works as advertised, because I have limited alternatives.

I'm not really willing to spend $300 on a radiating dummy load, because I have LOTS of alternatives including building one myself for a lot less.

That can't be hard to understand, or differentiate between the two, can it?

> Your questions tend toward seeking validation:
> "Will X work for Y?"
>
> To which some responses offer
> "Um, yes, but why would you want to do that?"
>
> "Because I don't what Z."
>
> "OK, X for Y without Z can be found with model A."
>

> "Model A will do, but it doesn't give me B."
>
> "OK, X for Y without Z but with B."
>
> This can go on for a long time.

I think it's called "doing some research" where questions beget answers that then raise more questions that perhaps weren't thought of before, until finally everything falls into place.

You want me to go away and come back with a full IEEE-STD-830-1998 requirements analysis before asking any questions. I've been doing that kind of stuff for a living for a very long time and I'm pretty sure it doesn't work that way... you ask questions, challenge the answers, come up with more questions, and eventually you end up with what you need.

Is it the fact that I tend to challenge the answers ("Ah, yes, but what about...?") that seems to bother you so much.

I'll tell you what, Richard, I appreciate the help you have provided so far, I really do, but if it's all going to bug you so much may I suggest that it's OK if you just stop responding to me? I'll miss your sage advice but I guess I'll live with that...

> Being meticulous about "efficient" would have you expressing what loss
> is allowable.

2 db loss is unacceptable if it means I can't hear the stations I need to hear, and they can't hear me.

18 db loss is fine if I can still hear them and they can hear me.

> By inference to your tendency to select a T2FD (loss in the ballpark of
> at least 3dB), then yes (and with proper design and construction), 0.07
> wl spacing between elements is efficient

This is what I mean. Two completely different requirements, two completely different solutions. Apples to oranges. And I have no "tendency to select a T2FD". It's one of many options. But I think you knew that and you're just having some fun at my expense, which is fine but it's over now. :-)

524. Re: 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 22:58:26 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.16.22.58.26.714811@from.qrz.com>
Source record: 37238

On Thu, 16 Aug 2007 12:46:26 -0700, Richard Clark wrote:

> Doubling the dimensions of:
> http://home.comcast.net/~kb7qhc/antennas/verticals/Cage/cage.htm
> would satisfy 3/4ths of your spectrum requirement

At the risk of sounding negative again, is it OK if I point out that one
of my early needs involved NVIS operation (it's in one of my early posts),
and verticals in general and cages in particular aren't really suitable
for that?

525. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 23:08:02 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa2lcpjch1@news.albasani.net>
Source record: 37239

Dave Oldridge wrote:

> ...
> Rocks break swords. Any system that leaks RF in one direction will leak
> it both ways.
>
>

And mice scare elephants, but for no good reason and little consequence ...

JS

526. get kelp

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 23:22:20 UTC
From: Mark@TayleorRobesin.org
Message-ID: <01n9c3lus5btah5tso23krrqoharjr9s04@4ax.com>
Source record: 37240
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.ham-radio.vhf-uhf

On Thu, 16 Aug 2007 16:58:47 -0400, "an old fiend"
<kbprqueer@punce.net> wrote:

>

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

527. Re: Two Good Days Spent with Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 23:29:15 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46c4ddcc$0$3780$4c368faf@roadrunner.com>
Source record: 37241

"Owen Duffy" <none@no.where> wrote in message
news:Xns998E9B74A192Bnonenowhere@61.9.191.5...
> "Sal M. Onella" <salmonella@food.poisoning.org> wrote in
> news:70Pwi.60706$vS1.34893@newsfe16.phx:
>
>>
>> "Jimmie D" <GFENDER@carolina.rr.com> wrote in message
>> news:46c3b629$0$18960$4c368faf@roadrunner.com...
>>> >
>>>
>>> Stacking two 100 ohm impedance quads is electrically about as easy as
>>> it gets. An electrical 1/4wl of any good quality coax from each
>>> antenna to a
>> T.
>>> 50 ohm cable to the shack.
>>
>> Thanks. I would've thought it needed to be 1/4w/l of 75-ohm cable,
>> but
>> I'll try it.
>
> You are right to question to advice Sal.
>
> Of course with a 1/4wl with VSWR=2, the Zo does matter.
>
> However, Jimmie might have meant each leg to be a 1/2wl (electrical)...
> close wasn't it! In that case, Zo isn't critical.
>
> Owen

Owen you are a good mind reader, sorry about the typo, should have been 1/2
wl.

Jimmie

528. Re: Two Good Days Spent with Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-16 23:36:48 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46c4df8e$0$3821$4c368faf@roadrunner.com>
Source record: 37242

```
"Jimmie D" <GFENDER@carolina.rr.com> wrote in message
news:46c4ddcc$0$3780$4c368faf@roadrunner.com...
>
> "Owen Duffy" <none@no.where> wrote in message
> news:Xns998E9B74A192Bnonenowhere@61.9.191.5...
>> "Sal M. Onella" <salmonella@food.poisoning.org> wrote in
>> news:70Pwi.60706$vS1.34893@newsfe16.phx:
>>
>>>
>>> "Jimmie D" <GFENDER@carolina.rr.com> wrote in message
>>> news:46c3b629$0$18960$4c368faf@roadrunner.com...
>>>> >
>>>>
>>>> Stacking two 100 ohm impedance quads is electrically about as easy as
>>>> it gets. An electrical 1/4wl of any good quality coax from each
>>>> antenna to a
>>> T.
>>>> 50 ohm cable to the shack.
>>>
>>> Thanks. I would've thought it needed to be 1/4w/l of 75-ohm cable,
>>> but
>>> I'll try it.
>>
>> You are right to question to advice Sal.
>>
>> Of course with a 1/4wl with VSWR=2, the Zo does matter.
>>
>> However, Jimmie might have meant each leg to be a 1/2wl (electrical)...
>> close wasn't it! In that case, Zo isn't critical.
>>
>> Owen
>
> Owen you are a good mind reader, sorry about the typo, should have been
> 1/2 wl.
>
Not to mention you would never get enough space between the antennas using
1/4wl sections.
```

529. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 00:31:10 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13c9r2f3oc56a2e@corp.supernews.com>
Source record: 37243

nm5k@wt.net wrote:
>
> How would I get fined for pointing my antenna to Europe? It legal for
> me to point my antenna to Europe, run an amp, and talk all day if
> I want to. . .
> . . .
> So while you are moaning and groaning about the problem, I will
> be taking care of it myself in an orderly military manner.
> Any problems they have will be due to their own shoddy system
> design and line leakage which is a two way street I remind..
> Not my gear. So they won't have a leg to stand on if they or even
> you complain to the FCC.

Do you really seriously believe that if your amateur operation was causing a huge company to lose money that the FCC or any other government entity would take your side?

Boy, have I got news for you!

Roy Lewallen, W7EL

530. Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 00:52:22 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <9j6xi.231$LL7.59@nlpi069.nbdc.sbc.com>
Source record: 37244

http://www.telegraph.co.uk/earth/main.jhtml?xml=/earth/2007/08/16/scispeed116.xml
--
73, Cecil http://www.w5dxp.com

531. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 00:53:37 UTC
From: bg998@FreeNet.Carleton.CA
Message-ID: <fa2rih$t38$1@theodyn.ncf.ca>
Source record: 37245

John Smith I (assemblywizard@gmail.com) writes:
>
> ... however, the system I
> looked at was almost entirely underground to businesses and homes.
>

An interesting point! And did this underground system radiate at HF??

It seems to me that if a BPL system can be made that doesn't radiate at
HF, then I have no problem with it.

... Martin VE3OAT

532. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 01:02:43 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns998F7055F9C0nonenowhere@61.9.191.5>
Source record: 37246

Roy Lewallen <w7el@eznec.com> wrote in
news:13c9r2f3oc56a2e@corp.supernews.com:

> nm5k@wt.net wrote:
>>
>> How would I get fined for pointing my antenna to Europe? It legal for
>> me to point my antenna to Europe, run an amp, and talk all day if
>> I want to. . .
> > . . .
>> So while you are moaning and groaning about the problem, I will
>> be taking care of it myself in an orderly military manner.
>> Any problems they have will be due to their own shoddy system
>> design and line leakage which is a two way street I remind..
>> Not my gear. So they won't have a leg to stand on if they or even
>> you complain to the FCC.
>
> Do you really seriously believe that if your amateur operation was
> causing a huge company to lose money that the FCC or any other
> government entity would take your side?
>
> Boy, have I got news for you!

Yes Roy, it is incredibly naive! Just another of the hundreds of false reasons why 'BPL won't affect me'.

I don't know of the situation in the US, but in Australia, a licence to transmit on a given frequency does not override another law that in a very general way prohibits interfering with a telecommunications carriage service.

So, in Australia, it may be that no new legislation is needed to silence hams who disrupt a BPL system (interfere with a telecommunications carriage service).

Some of us continue to work on objective measurement of ambient noise levels and BPL emissions to document to issue, and the risk to BPL deployments if they are held to lower emissions than they would like.

Right now I am working on documentation of a series of measurements made prior to BPL deployment in Sydney. Another series will be made after deployment, and the measurements by an EMC test house and the WIA will be considered by the carrier, the regulator, and the relevant Australian standards committee in a more cooperative environment than seems to exist in some jurisdictions.

Interestingly, the EMC test houses invariably use equipment that is not capable of measuring ambient noise levels on HF, they are just not sufficiently sensitive.

This is a worry, especially when rumour has it that ITU-R is working on a revision of P.372-8 'Radio Noise' that is likely to see an increase in expected ambient noise levels on HF. The inevitable creep of spectrum pollution. As part of our study of the site in Sydney, we will be trying to justify exclusion of the carrier's noisy SMPS on their PayTV equipment from determination of the ambient noise levels.

OTOH, we have used a Buddipole and FSM to make measurements of ambient noise levels that are not invalidated by instrument noise. An article characterising the Buddipole for use with FSM is at http://www.vk1od.net/buddipole/index.htm .

The fact remains that we hams do not well understand our operating environment, and sadly, seem to have little interest in it.

Oh well, there will probably be more development of simulators for the HF experience in the future!

Owen

533. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 01:03:39 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa2s5jvol1@news.albasani.net>
Source record: 37247

Martin Potter wrote:

> An interesting point! And did this underground system radiate at HF??
> ...
> ... Martin VE3OAT

Martin:

It is the house lines which have some amateurs worried, unless you have an underground home, or all lines are run through properly shielded conduit (NOT likely!), this is what worries most amateurs ...

Although I use 10/11 meters daily and 80 meters 2/3 times a week, most of my operations have moved vhf/uhf/shf. I think that is the future. HF simply servers too few to demand the consideration some wish.

Regards,
JS

534. Re: Cushcraft A4 Owners

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 01:35:13 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <caudnZD3hd_WYVnbnZ2dnUVZ_qWtnZ2d@giganews.com>
Source record: 37249

R. Scott wrote:
> Question
>
> I assembled it per the instructions for the band parts I wanted. I
triple
> measured and Up she went.
>
> I'm really Low (as in instead of 14.150 its down around 13.950)
>
> And I just noticed yesterday looking up that the director seemed a bit
> longer than the driven.
>
> And I know as per the first line, I assembled it to the tee for per the
> instruction sheet.
>
>
>
> Suggestions ?

I had a similar issue with an A3S that's used during Field Day. It turned out that the PVC caps on the ends of the traps weren't pushed-on flush with the ends of the traps. We found this when double-checking the overall length of the elements -- they were a few inches long, even though the intermediate lengths appeared to be correct. Make sure the PVC caps are pushed *all the way* onto the traps.

You may also experience some aberration in the resonant frequency if you don't have adequate decoupling of the feedline's shield from the DE feedpoint. Cushcraft recommends winding several turns of feedline into a coil as close as possible to the DE feedpoint. You can also use a 1:1 balun of your favorite flavor.

Vy 73,
Bryan WA7PRC

535. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 01:37:09 UTC
From: Yuri Blanarovich <K3BU@optonline.net>
Message-ID: <fa2u4a$49a$1@aioe.org>
Source record: 37248

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:9j6xi.231$LL7.59@nlpi069.nbdc.sbc.com...
> http://www.telegraph.co.uk/earth/main.jhtml?xml=/earth/2007/08/16/scispeed116.xml
> --
> 73, Cecil http://www.w5dxp.com

Is it like Goosian thing in the tunnnnelll? Like, light is soooo fast that
it comes on like before you flick the switch?

Yuri K3BU.us

536. Re: Two Good Days Spent with Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 01:41:49 UTC
From: Yuri Blanarovich <K3BU@optonline.net>
Message-ID: <fa2ud1$4u0$1@aioe.org>
Source record: 37250

>> >
>> Don't overlook that you can parallel two quads to get to 50 ohms as
>> well!
>

Much simpler solution, build 3 element quad with wide spaced elements and
you get 50 ohm impedance, good pattern/gain and simple antenna.

Yuri K3BU.us

537. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 01:42:56 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa2uf8gvh3@news.albasani.net>
Source record: 37251

Cecil Moore wrote:
> http://www.telegraph.co.uk/earth/main.jhtml?xml=/earth/2007/08/16/scispeed116.xml
>

This immediately suggests possible and interesting uses in
cooling/refrigeration, if this "scientific discovery" holds water ...

Regards,
JS

538. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 02:04:51 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1187316291.614759.141370@q3g2000prf.googlegroups.com>
Source record: 37252
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

On Aug 16, 4:29 am, "Brenda Ann" <bren...@shinbiro.com> wrote:
> "John Navas" <spamfilt...@navasgroup.com> wrote in message
>
> news:0cq7c3def3f3rdpt56urvgf6c3ntekbk28@4ax.com...
>
>
>
>
>
> > On Thu, 19 Jul 2007 18:43:58 -0700, Don Bowey <dbo...@comcast.net> wrote
> > in <C2C5616E.700B1%dbo...@comcast.net>:
>
> >>On 7/19/07 4:42 PM, in article 1mtv93ticddur8rq3tghsra57n9508m...@4ax.com,
> >>"John Navas" <spamfilt...@navasgroup.com> wrote:
>
> >>> On Thu, 19 Jul 2007 14:45:00 GMT, j...@specsol.spam.sux.com wrote in
> >>> <tp94n4-17l....@mail.specsol.com>:
>
> >>>> In rec.radio.amateur.antenna Radium <gluceg...@gmail.com> wrote:
>
> >>>>> Digital cell phones should stop using the compression they use and
> >>>>> start using monaural WMA compression with a CBR of 20 kbps or less and
> >>>>> a sample rate of at least 44.1 KHz. In addition, the following must
> >>>>> also apply:
>
> >>>> The audio bandwidth of the phone system is about 3 KHz.
>
> >>> Actually more like 10 KHz.
>
> >>If he is commenting on the bandwidth of a message network channel/circuit,
> >>including cellular, it is about 3 kHz.
>
> > Audio. Suggest you read more carefully.
>
> > --
> > Best regards, FAQ FOR CINGULAR WIRELESS:
> > John Navas <http://en.wikibooks.org/wiki/Cingular_Wireless_FAQ>
>
> POTS phone lines are very limited. IIRC from my work with those systems,
> about 300-3600 Hz. Strictly human voice range, not meant for hi-fi. Special
> lines are still available for hi-fi use as audio STL's

? "STL's" ?

539. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 02:29:49 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46c5081b$0$18974$4c368faf@roadrunner.com>
Source record: 37253

"Yuri Blanarovich" <K3BU@optonline.net> wrote in message
news:fa2u4a$49a$1@aioe.org...
>
> "Cecil Moore" <nospam@w5dxp.com> wrote in message
> news:9j6xi.231$LL7.59@nlpi069.nbdc.sbc.com...
>> http://www.telegraph.co.uk/earth/main.jhtml?xml=/earth/2007/08/16/scispeed116.xml
>> --
>> 73, Cecil http://www.w5dxp.com
>
> Is it like Goosian thing in the tunnnnelll? Like, light is soooo fast that
> it comes on like before you flick the switch?
>
> Yuri K3BU.us
>
>

tunneling doesnt take faster than light speed to explain, only that there
are more than three dimensions to space. In some dimension the begining and
end was not as far apart as the scientist thought they were. In other words
you dont travel faster than light, you just take a short cut.

Jimmie

540. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 02:34:45 UTC
From: D Peter Maus <DPeterMaus@worldnet.att.net>
Message-ID: <9P7xi.40006$ax1.33070@bgtnsc05-news.ops.worldnet.att.net>
Source record: 37254
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

```
RHF wrote:
> On Aug 16, 4:29 am, "Brenda Ann" <bren...@shinbiro.com> wrote:
>> "John Navas" <spamfilt...@navasgroup.com> wrote in message
>>
>> news:0cq7c3def3f3rdpt56urvgf6c3ntekbk28@4ax.com...
>>
>>
>>
>>
>>
>>> On Thu, 19 Jul 2007 18:43:58 -0700, Don Bowey <dbo...@comcast.net> wrote
>>> in <C2C5616E.700B1%dbo...@comcast.net>:
>>>> On 7/19/07 4:42 PM, in article 1mtv93ticddur8rq3tghsra57n9508m...@4ax.com,
>>>> "John Navas" <spamfilt...@navasgroup.com> wrote:
>>>>> On Thu, 19 Jul 2007 14:45:00 GMT, j...@specsol.spam.sux.com wrote in
>>>>> <tp94n4-17l....@mail.specsol.com>:
>>>>>> In rec.radio.amateur.antenna Radium <gluceg...@gmail.com> wrote:
>>>>>>> Digital cell phones should stop using the compression they use and
>>>>>>> start using monaural WMA compression with a CBR of 20 kbps or less and
>>>>>>> a sample rate of at least 44.1 KHz. In addition, the following must
>>>>>>> also apply:
>>>>>> The audio bandwidth of the phone system is about 3 KHz.
>>>>> Actually more like 10 KHz.
>>>> If he is commenting on the bandwidth of a message network channel/circuit,
>>>> including cellular, it is about 3 kHz.
>>> Audio. Suggest you read more carefully.
>>> --
>>> Best regards, FAQ FOR CINGULAR WIRELESS:
>>> John Navas <http://en.wikibooks.org/wiki/Cingular_Wireless_FAQ>
>> POTS phone lines are very limited. IIRC from my work with those systems,
>> about 300-3600 Hz. Strictly human voice range, not meant for hi-fi. Special
>> lines are still available for hi-fi use as audio STL's
>
> ? "STL's" ?
>

Studio to Transmitter Link.
```

541. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 02:40:03 UTC
From: nm5k@wt.net
Message-ID: <1187318403.373984.138470@l22g2000prc.googlegroups.com>
Source record: 37255

On Aug 16, 7:31 pm, Roy Lewallen <w...@eznec.com> wrote:

>
> Do you really seriously believe that if your amateur operation was
> causing a huge company to lose money that the FCC or any other
> government entity would take your side?
>
> Boy, have I got news for you!
>
> Roy Lewallen, W7EL

I don't care if they do or not. They most certainly would not
be able to fine me if I'm not breaking any amateur rules.
What are they going to do, shut down every ham in the area?
There are 143 hams just in my close general area which would
cover the 77096 and 77035 zip codes.. And that's a very small
portion of this town. Maybe within a 5 mile radius?
If I'm not trashing their system, someone else will be.
The FCC will be busy in this area. I suppose they will have to
shut down everyone if they want a clean BPL system.
I don't see it myself. I'd fight them on it if they pressed the
issue with me. And I rarely actually run an amp these days.
If my 100w causes them problems, I'd consider that a personal
problem of the BPL system owners. I actually don't see it
coming to this area anytime soon being we already have cable,
etc.. I don't think it would sell too well, being cable is already
just as fast or faster.
MK

542. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 03:18:24 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa3429kdk1@news.albasani.net>
Source record: 37256

nm5k@wt.net wrote:
> On Aug 16, 7:31 pm, Roy Lewallen <w...@eznec.com> wrote:
>
>> Do you really seriously believe that if your amateur operation was
>> causing a huge company to lose money that the FCC or any other
>> government entity would take your side?
>>
>> Boy, have I got news for you!
>>
>> Roy Lewallen, W7EL
>
> I don't care if they do or not. They most certainly would not
> be able to fine me if I'm not breaking any amateur rules.
> What are they going to do, shut down every ham in the area?
> There are 143 hams just in my close general area which would
> cover the 77096 and 77035 zip codes.. And that's a very small
> portion of this town. Maybe within a 5 mile radius?
> If I'm not trashing their system, someone else will be.
> The FCC will be busy in this area. I suppose they will have to
> shut down everyone if they want a clean BPL system.
> I don't see it myself. I'd fight them on it if they pressed the
> issue with me. And I rarely actually run an amp these days.
> If my 100w causes them problems, I'd consider that a personal
> problem of the BPL system owners. I actually don't see it
> coming to this area anytime soon being we already have cable,
> etc.. I don't think it would sell too well, being cable is already
> just as fast or faster.
> MK

You could be quite right! Perhaps you are special and 5-10 years from
now you can tear up every one of your neighbors BPL and they will love
you! <grin>

Regards,
JS

543. Re: 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 03:22:43 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <T6KdnRTGJs3xiVjbnZ2dnUVZ_j-dnZ2d@bright.net>
Source record: 37257

Dear WA1RKT:

For less than $1000 you may purchase and use a LPDA that will
accomplish what you specify. Several such antennas are on the market or you
could construct one from scratch.

Some positive aspects of a LPDA:
1. no moving parts
2. "instant" BW so you may use the scanning you mentioned
3. using anything that is at all of a reasonable size, the antenna
inherently has low sensitivity to minor construction and other errors (much
favored in ice country because their performance degrades slowly with ice
coverage - not found to be true with a critically "tuned" yagi)
4. performance as constructed is close to that predicted with NEC -
tweaking is usually just not needed (occasionally, the shorting strap needs
to be tweaked)

Consider the conventional solution for the BW requirements you have set
out.

The StepR antennas work, but questions remain as to how well and for how
long. If I were to go on a trip to a salt-water DX entity, I sure would use
their vertical right on the beach. In other words, they are a solution to
some problems.

Good luck. 73, Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in message
news:pan.2007.08.16.22.54.26.849221@from.qrz.com...
>

> I'm willing to spend $1000, if I have to, on a two element beam that
> claims to work efficiently from 14 to 24 MHz (and beyond), IF it works as
> advertised, because I have limited alternatives.
>

544. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 03:48:11 UTC
From: nm5k@wt.net
Message-ID: <1187322491.568790.64070@z24g2000prh.googlegroups.com>
Source record: 37258

On Aug 16, 8:02 pm, Owen Duffy <n...@no.where> wrote:

>
> Yes Roy, it is incredibly naive! Just another of the hundreds of false
> reasons why 'BPL won't affect me'.

That statement doesn't make sense. What would me transmitting on
my legal licensed frequencies have to do with BPL effecting me or
not?
If BPL is in this area, it's going to effect me whether I transmit or
not,
if it trashes my receiver.
It's not naive. I just don't care what they think. I think it's a
lousy
system, they approved it, and now they are going to have to live
with the problems that are sure to come up. I'm not going to be
changing my operation any time soon.

>
> I don't know of the situation in the US, but in Australia, a licence to
> transmit on a given frequency does not override another law that in a
> very general way prohibits interfering with a telecommunications carriage
> service.

That would be all well and good if they used a single frequencies one
could
avoid... The way I understand it, I stand a good chance of trashing
them
no matter what frequency I'm on.
If they are worried about interference to a carriage system, they
should
not place it in the same spectrum with another existing service when
using power lines, or any other type of leaky or non shielded wiring.
What about their interference to HF radio users? Not all are hams.
Some are commercial users, such as Houston Universal Radio, which
supplies radio services for commercial aircraft. I guess they will
have to shut
down also.. I'm sorry.. I don't buy it.. It's a lousy system and it's
not my fault that it is lousy. Why should amateurs pay for this
mistake
in planning?

>
> The fact remains that we hams do not well understand our operating
> environment, and sadly, seem to have little interest in it.

How do you come to this conclusion?
Here in the U.S., according to most all I read, it's up to the
unlicensed
emitter to make sure they do not cause interference to licensed
stations.

http://www.ntia.doc.gov/ntiahome/fccfilings/2003/bplcomments_08132003.htm
http://www.ieee.org/organizations/pes/public/2004/sep/pesview.html
http://www.arrl.org/tis/info/HTML/plc/files/BPL_paper.pdf
https://www.arrl.org/forms/fdefense/
Yes, that's right. The ARRL is suing the FCC over this.
I agree with that decision 100%.

I intend to hold them to that. Being an unlicensed emitter, I think
they
should have to accept any interference that comes their way.
And not all will be hams.. What if they decide to run BPL near
Houston Hobby airport where Universal Radio is located.
Do you think they will choose BPL over commercial aircraft
comms?
I doubt it.. I don't think amateur stations should be considered
any differently, being we are licensed stations.

Myself, I think the FCC should be horsewhipped for their
performance in deciding the BPL issues.
They choose to ignore valid test data, and go with who has
the money to spend.
This is why I really could care less what they have to say to
me about any operating I might do. I'll sit right on my front porch
and tell them to bite me if they show up to complain.
They promoted the flawed technology. I had nothing to do with
it. And I have a legal right to operate on any of my assigned
frequencies without undo or unwarranted restrictions.
Imposing "quiet hours" will not help. Lowering my power
will probably not help too much if I'm using gain antennas
pointed at the offending lines, and there is no way to
avoid that if I want to work anywhere to the east.

>
> Oh well, there will probably be more development of simulators for the HF
> experience in the future!

And there are probably people that would enjoy such a thing.. : (
MK

545. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 04:16:22 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa37eufqj1@news.albasani.net>
Source record: 37259

nm5k@wt.net wrote:

> ...
> I've been running that station for years with no problems to the
> neighbors. Any other ignorant comments?
> BTW, you'll be thinking toothless if I ever run across you in
> person. It will take great restraint for me not to beat you half
> to death. I can't stand a smartass, and you are a primetime
> smartass. Smartasses don't last very long around me, and
> I still have all my teeth to prove it.
> MK
>

At 6'2", 220 lbs and buffed to the max, I'd snap ya like a matchstick,
IDIOT!

JS

546. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 04:29:07 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa386rfqj2@news.albasani.net>
Source record: 37260

nm5k@wt.net wrote:
> On Aug 16, 11:16 pm, John Smith I <assemblywiz...@gmail.com> wrote:
>
>> At 6'2", 220 lbs and buffed to the max, I'd snap ya like a matchstick,
>> IDIOT!
>>
>> JS
>
> Yea, thats what they all say...
> MK
>

You are lucky you can say it all all, ya toothless old hag ... obviously
you have had the chit knocked out of you many time with that
mouth--course you could just be a coward and pick on the little guys.
IDIOT!

JS

547. Filtering BPL from powerlines

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 04:49:22 UTC
From: Barnard Peters <one@two.com>
Message-ID: <pan.2007.08.17.04.49.22.352797@blueplanet>
Source record: 37261

Wouldn't it be possible to place a filter at your meter that would shunt
the BPL signal to ground for the whole neighborhood?

548. Re: 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 04:50:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <dt7ac31ug6jujm2e3f7n6eb17lbea5nl13@4ax.com>
Source record: 37262

On Thu, 16 Aug 2007 18:58:26 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>On Thu, 16 Aug 2007 12:46:26 -0700, Richard Clark wrote:
>
>> Doubling the dimensions of:
>> http://home.comcast.net/~kb7qhc/antennas/verticals/Cage/cage.htm
>> would satisfy 3/4ths of your spectrum requirement
>
>At the risk of sounding negative again, is it OK if I point out that one
>of my early needs involved NVIS operation (it's in one of my early posts),
>and verticals in general and cages in particular aren't really suitable
>for that?

A review of my response at that time offered a dipole of similar
construction in its place. It doesn't take much math (or rotation) to
shift from monopole to dipole.

There is NOTHING about a cage that makes it unsuited for NVIS. It may
be intractable, but that goes with the turf.

I wonder though about why this is so agonizing. If you work MARS/CAP,
it would seem that solutions would be there in pile-ups for the QST
tossed into radio land. That, or everyone is wandering in the
wilderness.

It is not like I haven't seen these questions about MARS/CAP asked
before, but most were satisfied with the air-cooled resistor and
didn't show much interest in efficiency (what for? there was no real
choice in the matter without several kilobucks of investment anyway).
Go to Salvation Army and buy toasters for lossy loads (they come in
1KW values for $5).

BalUn? When you characterize allowable efficiency as being between
-2dB and -18dB, then you don't even need a BalUn anymore. It's going
to cost you $1000 to rotate it (whatever "it" is). And if crisis (I
gotta hear them and they gotta hear me) drives the design, then you
have to open the wallet. Does anyone else in MARS/CAP get by with
less? In a dozen years I haven't seen a single post by one to claim
they do (or admit they couldn't hear or be heard).

You are going to have several many antennas. None are going to be
whole solutions. Some are going to be slow to tune. Some may never
tune. Some may never be heard. Propagation will be a cruel arbiter.
Guarantees won't be honored. This is pretty much the same fate in the
Ham bands, and out of band frequency doesn't alter this reality very

much.

Decide to build a farm efficiently. Select ranges of frequency
suitable to octaves, not decades. Point immovable antennas towards
your expected traffic. Or if you are filling in a network's uncovered
areas, point them in those directions (that is what a network is for,
isn't it?).

I taught HF/VHF/UHF comm systems in the Navy and served as senior
Petty Officer in CIC. There is no such thing as a single solution.

73's
Richard Clark, KB7QHC

549. Re: 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 04:51:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <al2ac3hdjdr46gb8an0h26us490k0pdngq@4ax.com>
Source record: 37263

On Thu, 16 Aug 2007 18:54:28 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>This is what I mean. Two completely different requirements, two completely
>different solutions. Apples to oranges. And I have no "tendency to select
>a T2FD". It's one of many options. But I think you knew that and you're
>just having some fun at my expense, which is fine but it's over now. :-)

I haven't got a clue just what your apples and oranges are, actually.

73's
Richard Clark, KB7QHC

550. Re: Filtering BPL from powerlines

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 04:54:53 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa39n5$l8d$1@news.albasani.net>
Source record: 37264

Barnard Peters wrote:
> Wouldn't it be possible to place a filter at your meter that would shunt
> the BPL signal to ground for the whole neighborhood?

Isn't that a bit like asking if you short your phone line, can you knock
out all the neighbors phones?

Or, even better and more accurate, if you short your cable tv, can you
knock out all the other neighbors cable?

Geesh, I am glad I am not one of you guys neighbors. You guys obviously
live on the WRONG side of the tracks.

Just great, and then you wonder why the public at large considers
amateurs eccentric and absurd ... :-(

JS

551. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 04:57:37 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa39s9$l8d$2@news.albasani.net>
Source record: 37265

nm5k@wt.net wrote:

> Right, I'm the coward posting using my real name, while you
> hide behind a fake one and run your mouth. I've got news for
> you. *You* are the one with the mouth. I never get mouthy
> with anyone until I get the same from them first. And you
> run yours in *every* thread I see you in.
> I'm not wasting any more time with you. I have better things
> to do. I will totally ignore you from now on, so you won't
> have to worry about my mouth, and I won't have to listen
> to yours. Any fool can go back through the thread and see
> where the smart mouth first gets kicked in. I think they will
> find "John Smith I" next to them.
> It's always the same time after time. You end up disagreeing
> with whatever I say, so you start up with the snide smartass
> remarks.
> You don't see me getting smart and snotty with people I
> disagree with. I can disagree without being a total ass.
> Of course, you can live in a state of denial, and think you
> are not a smartass, but thats a personal problem you will
> have to deal with on your own.
> Later..
> MK
>

Frankly, I don't want to see you doing anything anymore, from your text
you are an outrageous idiot and nothing more ...

PLONK!!

JS

552. Re: Filtering BPL from powerlines

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 05:41:32 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns998F9F9B4951Anonenowhere@61.9.191.5>
Source record: 37266

Barnard Peters <one@two.com> wrote in news:pan.2007.08.17.04.49.22.352797
@blueplanet:

> Wouldn't it be possible to place a filter at your meter that would shunt
> the BPL signal to ground for the whole neighborhood?
>

No, but one of the issues with BPL is that equipment connected to outlets
changes the configuration, and although BPL is adaptive, reliability of
full speed service at any location in a premises is not assured.

Owen

553. Re: Two Good Days Spent with Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 05:58:41 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <lOaxi.26964$Mu5.24823@newsfe15.phx>
Source record: 37267

"Yuri Blanarovich" <K3BU@optonline.net> wrote in message
news:fa2ud1$4u0$1@aioe.org...
>
> >> >
> >> Don't overlook that you can parallel two quads to get to 50 ohms as
> >> well!
> >
>
>
> Much simpler solution, build 3 element quad with wide spaced elements and
> you get 50 ohm impedance, good pattern/gain and simple antenna.

Well, there you go! I had it in the back of my head that adding appropriate parasitics would pull the impedance down. My problem was that all I had to fiddle with was the driven element and a reflector.

With apologies to Yuri, I may still try some of the stranger approaches -- simply to see what works and what doesn't.
(My approach to ham radio is like farmboys playing with dynamite, except you don't usually kill nuthin'.)

554. Re: Filtering BPL from powerlines

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 06:44:02 UTC
From: gsm@mendelson.com
Message-ID: <slrnfcagme.n1l.gsm@cable.mendelson.com>
Source record: 37268

Barnard Peters wrote:
> Wouldn't it be possible to place a filter at your meter that would shunt
> the BPL signal to ground for the whole neighborhood?

No. BPL signals are already filtered out by distribution transformers.
In order for BPL to work, there are relaying devices installed at the
transformer.

There are several systems for the last "100 feet" including WiFi type
systems.

Here in Isreal there was a BPL trial and becuase of the interference
to HF communication it was not allowed. Israel Electric took a different
approach and has wired fiber optic cable all along their right of
way. They use it for their own network, remote managment and monitoring
etc.

They can also use it for selling Internet service if approved, without
using BPL.

As for long distance wireless access, if WiMax ever reaches its claimed
potential range, it would be cheaper to install a MESH type WiMax network
on power poles. Not only would it provide rural Internet access cheaply,
it could be used to sell wireless Internet access to travelers with
handheld devices.

BTW, 2.4 gHz is not the only band for wirless services. I have several
DECT cordless phones which operate in the 1.8gHz band, interfere with
nothing, including cell phones which also operate here on that band
and have longer range than my WiFi devices.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

555. Re: Filtering BPL from powerlines

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 08:25:40 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns998FBB6F0DEF9nonenowhere@61.9.191.5>
Source record: 37269

gsm@mendelson.com (Geoffrey S. Mendelson) wrote in
news:slrnfcagme.n1l.gsm@cable.mendelson.com:

> Barnard Peters wrote:
>> Wouldn't it be possible to place a filter at your meter that would shunt
>> the BPL signal to ground for the whole neighborhood?
>
> No. BPL signals are already filtered out by distribution transformers.
> In order for BPL to work, there are relaying devices installed at the
> transformer.

The explanation depends on a particular deployment topology, but the answer
remains NO for other deployment topologies as well.

Owen

556. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 08:37:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13canip175erk0c@corp.supernews.com>
Source record: 37270

nm5k@wt.net wrote:
> . . .
> Myself, I think the FCC should be horsewhipped for their
> performance in deciding the BPL issues.
> They choose to ignore valid test data, and go with who has
> the money to spend. . .

Exactly my point. The ARRL can lobby all they want, but until they can match the "campaign contributions" of the big-money boys, they'll pretty much be ignored. Money does the talking. If your "legal" operation interferes with the making of large amounts of money, either your legal status will be ignored (but you're free to sue the power company if you want), or the FCC will solve the problem with a regulatory change in favor of the ones with the money, or a little baksheesh will change hands for an "earmark" on some obscure congressional bill to make a special law just for folks like you. That's the way our system works.

Anyone who likes sausage or has respect for the law shouldn't look too closely at how either is made.

Roy Lewallen, W7EL

557. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 08:45:27 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns998FBEC9C48A7nonenowhere@61.9.191.5>
Source record: 37271

Roy Lewallen <w7el@eznec.com> wrote in
news:13canip175erk0c@corp.supernews.com:

...
> want), or the FCC will solve the problem with a regulatory change in
> favor of the ones with the money, or a little baksheesh will change

A solution in the stroke of a pen.

It is the golden rule, he who has the gold makes the rules.

Owen

558. Thus it exist ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 09:13:21 UTC
From: Euro-Motors <euromotors@village.uunet.be>
Message-ID: <46c566a4$0$24921$5f6aeac3@news.scarlet.nl>
Source record: 37272

Hello i have sat disch with 2 axes steering
What i am looking for is this
I want unit thats do automatic orbit scanning and when sattelite is
detected that it stores this possition and that it allso says what
sattelite it is
later i can refind the stored sattelites when set up is done
willy

559. Re: Thus it exist ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 11:06:45 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1187348805.544566.327380@z24g2000prh.googlegroups.com>
Source record: 37273

Well, it is a nice fantasy...

560. Re: 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 11:53:57 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.17.11.53.55.659437@from.qrz.com>
Source record: 37274

On Thu, 16 Aug 2007 23:22:43 -0400, J. Mc Laughlin wrote:

> For less than $1000 you may purchase and use a LPDA that will
> accomplish what you specify. Several such antennas are on the market or
> you could construct one from scratch.

Good morning, Mac.

Yes, the log periodic was my other alternative to the SteppIR (in fact, the SteppIR was something I've been considering to mitigate the size of the LPDA). It should do well for the higher frequencies of interest (14 to 24 MHz).

At one time I considered a wire log periodic, pointing straight up, as an NVIS antenna for the lower range (2 to about 8 MHz). Then I went to lie down until the thought went away. :-)

561. Re: 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 11:55:25 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.17.11.55.25.875724@from.qrz.com>
Source record: 37275

Richard;

Thank you.

73,

Rick WA1RKT

562. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 12:41:05 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <BHgxi.1007$Oo.531@newssvr17.news.prodigy.net>
Source record: 37276

John Smith I wrote:
> Cecil Moore wrote:
>> http://www.telegraph.co.uk/earth/main.jhtml?xml=/earth/2007/08/16/scispeed116.xml
>
> This immediately suggests possible and interesting uses in
> cooling/refrigeration, if this "scientific discovery" holds water ...

Entangled particles may be a tunneling of sorts through
space-time. It has been proved to my satisfaction that
reality is non-local.
--
73, Cecil http://www.w5dxp.com

563. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 12:43:07 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <uJgxi.1008$Oo.978@newssvr17.news.prodigy.net>
Source record: 37277

Jimmie D wrote:
> tunneling doesnt take faster than light speed to explain, only that there
> are more than three dimensions to space. In some dimension the begining and
> end was not as far apart as the scientist thought they were. In other words
> you dont travel faster than light, you just take a short cut.

Beam me up, Scottie, and engage at Warp 6.
--
73, Cecil http://www.w5dxp.com

564. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 13:20:14 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <ULKdnfJEH919PVjbnZ2dnUVZ8q2dnZ2d@bt.com>
Source record: 37278

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:9j6xi.231$LL7.59@nlpi069.nbdc.sbc.com...
>
http://www.telegraph.co.uk/earth/main.jhtml?xml=/earth/2007/08/16/scispeed116.xml
> --
> 73, Cecil http://www.w5dxp.com

Seems I got shot down in flames when I mentioned this very topic a couple of months ago. Or maybe it was my attempt to try and visualise how this phenomenon might take place. :-(

If optical photons can tunnel through opaque materials, then why not radio frequency photons? An antenna made completely of insulating materials would at least reduce the risk of lightning strikes. :-)

Mike G0ULI

565. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 13:23:56 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fa47hd$1buo$1@f04n12.cac.psu.edu>
Source record: 37279

Roy Lewallen wrote:
> nm5k@wt.net wrote:
>>
>> How would I get fined for pointing my antenna to Europe? It legal for
>> me to point my antenna to Europe, run an amp, and talk all day if
>> I want to. . .
> > . . .
>> So while you are moaning and groaning about the problem, I will
>> be taking care of it myself in an orderly military manner.
>> Any problems they have will be due to their own shoddy system
>> design and line leakage which is a two way street I remind..
>> Not my gear. So they won't have a leg to stand on if they or even
>> you complain to the FCC.
>
> Do you really seriously believe that if your amateur operation was
> causing a huge company to lose money that the FCC or any other
> government entity would take your side?
>
> Boy, have I got news for you!

Gee, I guess we should just shut down and dismantle our stations, turn in our licenses, and find another hobby - hopefully one that involves big corporations that make a lot of money!

I'm a little surprised at the pessimism of some people who I would think would know better.

Is it a problem - you bet
Is it intractable? - no.

- 73 de Mike KB3EIA -

566. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 13:29:34 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <2phxi.49806$YL5.13827@newssvr29.news.prodigy.net>
Source record: 37280

Mike Kaliski wrote:
> Seems I got shot down in flames when I mentioned this very topic a couple of
> months ago.

Sounds like you experienced Relativity Hell. :-)
--
73, Cecil http://www.w5dxp.com

567. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 13:32:45 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fa481u$1etk$1@f04n12.cac.psu.edu>
Source record: 37281

Owen Duffy wrote:
> Roy Lewallen <w7el@eznec.com> wrote in
> news:13canip175erk0c@corp.supernews.com:
>
> ...
>> want), or the FCC will solve the problem with a regulatory change in
>> favor of the ones with the money, or a little baksheesh will change
>
> A solution in the stroke of a pen.
>
> It is the golden rule, he who has the gold makes the rules.

Money is Honey, my little sonny, and a rich man's joke is always funny.

Owen, I prescribe 2 weeks or R and R for you and Roy. Skepticism is healthy, but a descendence past pessimism into gloom is not healthy.

Beer and chips for everyone, and the floggings will continue until morale improves. ;^)

- 73 de Mike KB3EIA -

568. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 14:01:21 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa49npuct1@news.albasani.net>
Source record: 37182

Michael Coslo wrote:

> ...
> Owen, I prescribe 2 weeks or R and R for you and Roy. Skepticism is
> healthy, but a descendence past pessimism into gloom is not healthy.
> ...
> - 73 de Mike KB3EIA -

I'd say Owen, and especially Roy, are right on. If you must escape gloom at the price of ignoring truth, how then do you expect anything to get better. Lady justice might be required to wear a blind fold (these days she peeks into wallets), Joe Blow public needs to have his/her eyes wide open!

With the new 700Mhz freqs in the process of "arrangement" so that the BIG MONEY telcos get 'em and the telcos remain in control of expensive voice/data lines, and are allowed price control and use control, BPL is a sure to be attempted as an escape route.

Now you can fight this issue anyway you choose--but the real answer is to attack the beast in the heart, unfortunately the telcos are still one particularly ugly, brazen and large dragon! And of course, as Roy pointed out, these telcos are under the protection of corrupt, self-serving public servants who oppose the will of their masters (Joe Blow public.)

Now, run and hide from those fact, or not ...

Regards,
JS

569. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 14:09:34 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa4a78$26l$1@news.albasani.net>
Source record: 37183

Cecil Moore wrote:

> ...
> Entangled particles may be a tunneling of sorts through
> space-time. It has been proved to my satisfaction that
> reality is non-local.

You are open minded Cecil, that appeals to me, some it doesn't. If there is something new, or even the possibility of something new--I'll be there ...

Regards,
JS

570. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 14:16:21 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa4ajtuct2@news.albasani.net>
Source record: 37184

Mike Kaliski wrote:

> ...
> If optical photons can tunnel through opaque materials, then why not radio
> frequency photons? ...

You just can't pose a better question than that, it escapes me how
anyone can find fault with such a question(s).

Once we deal with the problem of rf waves appearing both as waves and
photons and get our minds wrapped around how this is (truly understand
rf), interesting things could happen.

Regards,
JS

571. Re: Two Good Days Spent with Quads

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 14:22:18 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <qoabc398m1o5uffun8pqufa95r78samfpf@4ax.com>
Source record: 37185

>> Much simpler solution, build 3 element quad with wide spaced elements and
>> you get 50 ohm impedance, good pattern/gain and simple antenna.
>
>Well, there you go! I had it in the back of my head that adding appropriate
>parasitics would pull the impedance down. My problem was that all I had to
>fiddle with was the driven element and a reflector.
>
>With apologies to Yuri, I may still try some of the stranger approaches --
>simply to see what works and what doesn't.
>(My approach to ham radio is like farmboys playing with dynamite, except you
>don't usually kill nuthin'.)
>
There probably is not anything new to done with Quads but please share
your experiments with us!

Some things I discovered:
1- Quad made from copper pipe gets heavy fast.
2- It is possible to match the driven element with Gammas, hairpins &
such but not worth the bother.
3- If nothing breaks when a Quad is loaded with ice it will probably
be all right after the ice melts.
4- Maintenance will be required frequently.
5- Stealth Quads are especially hard to do.
6- Lighter and more flexible is more durable.
7- If your transmitter will tolerate it, it will radiate well off of
design frequency but the pattern will be difficult to anticipate.
8- Due to the radiator being a closed loop the receive noise will be
down from most antennas.

John Ferrell W8CCW
"Life is easier if you learn to
plow around the stumps"

572. Re: Thus it exist ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 15:25:01 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <h5jxi.7$ze.0@trnddc07>
Source record: 37186

"Euro-Motors" <euromotors@village.uunet.be> wrote in message
news:46c566a4$0$24921$5f6aeac3@news.scarlet.nl...
> Hello i have sat disch with 2 axes steering
> What i am looking for is this
> I want unit thats do automatic orbit scanning and when sattelite is
> detected that it stores this possition and that it allso says what
> sattelite it is
> later i can refind the stored sattelites when set up is done
> willy

Hi Willy

What kind of satellites are you considering? How big is the Dish and
what frequency are you considering?
Timestep (http://www.time-step.com/) has alot of "small dish" antenna
pointing hardware and software for NOAA satellites.
NASA publishes alot of data on the position and tracking of satellites
http://science.nasa.gov/realtime/

Jerry

573. Re: 2-element SteppIR model 202

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 15:26:50 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <sOqdnZseWeW_I1jbnZ2dnUVZ_rmjnZ2d@bright.net>
Source record: 37187

Dear Rick:

Small (six element) LPDAs exist that have been used over the frequency range of interest by amateurs and military. The SWR tends to oscillate with frequency and the gain is reduced wrt to a larger LPDA, but they will work for what you wish to do. Perhaps I have not interpreted "size" correctly.

I have some experience with wire LPDAs that point straight up. Many years ago, a three (insert giggle) element was constructed to cover 4 to 6 MHz. Two towers. Three wires. It produced noticeable gain over a doublet. I no longer remember how high the towers were.

An aside: 2:1 or 2.5:1 frequency coverage by a single LPDA is straight forward. Larger ratios require one to consider more factors.

Perhaps one of the best antennas for covering the 4 to 5 MHz range is the classic tropical broadcast antenna. At center frequency: two one WL dipoles (fed in phase), 0.3 WL high and separated horizontally by 0.5 WL. Bring the two, equal feeds to a central pole and place them in parallel. It is possible to have a resulting impedance that is very acceptable. An advantage of this system is that the coverage is close to being equal in azimuth (at the TOAs of interest) and it has low sensitivity to distant, interfering stations.

Consider investing in EZNEC and learning to use same.

Do let us know what your antenna system ends up being. 73, Mac
N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in message
news:pan.2007.08.17.11.53.55.659437@from.qrz.com...
> On Thu, 16 Aug 2007 23:22:43 -0400, J. Mc Laughlin wrote:
>
> > For less than $1000 you may purchase and use a LPDA that will
> > accomplish what you specify. Several such antennas are on the market or
> > you could construct one from scratch.
>
> Good morning, Mac.
>
> Yes, the log periodic was my other alternative to the SteppIR (in fact,
> the SteppIR was something I've been considering to mitigate the size of
> the LPDA). It should do well for the higher frequencies of interest (14
> to 24 MHz).

>
> At one time I considered a wire log periodic, pointing straight up, as an
> NVIS antenna for the lower range (2 to about 8 MHz). Then I went to
> lie down until the thought went away. :-)
>
>

574. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 15:39:41 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns998F581BC1F37doldridgsprintca@64.59.135.159>
Source record: 37188

John Smith I <assemblywizard@gmail.com> wrote in
news:fa2lcpjch1@news.albasani.net:

> Dave Oldridge wrote:
>
> > ...
>> Rocks break swords. Any system that leaks RF in one direction will
>> leak it both ways.
>>
>>
>
> And mice scare elephants, but for no good reason and little
> consequence ...

When it's a few milliwatts of BPL up against an induced signal from a
kilowatt transmitter, then the mouse is the BPL.

And, according to the regulations, if I have to run the full legal limit
to be heard over the din, then it's legitimate.

Of course in a plutocracy like the Benighted States of America, whoever
has the most bucks makes the final policy and then hires state-paih thugs
to enforce it.

--
Dave Oldridge+
ICQ 1800667

575. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 15:41:16 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns998F5860D4496doldridgsprintca@64.59.135.159>
Source record: 37189

Roy Lewallen <w7el@eznec.com> wrote in
news:13c9r2f3oc56a2e@corp.supernews.com:

> nm5k@wt.net wrote:
>>
>> How would I get fined for pointing my antenna to Europe? It legal for
>> me to point my antenna to Europe, run an amp, and talk all day if
>> I want to. . .
> > . . .
>> So while you are moaning and groaning about the problem, I will
>> be taking care of it myself in an orderly military manner.
>> Any problems they have will be due to their own shoddy system
>> design and line leakage which is a two way street I remind..
>> Not my gear. So they won't have a leg to stand on if they or even
>> you complain to the FCC.
>
> Do you really seriously believe that if your amateur operation was
> causing a huge company to lose money that the FCC or any other
> government entity would take your side?
>
> Boy, have I got news for you!

But I'm enough of an anarchist to know that, unless the huge company
really LEANS on Industry Canada, they'll do what they usually do about
interference complaints. Which is to say, they'll harrass whoever they
can find but won't do enough legwork to really prove anything in court.

--
Dave Oldridge+
ICQ 1800667

576. Re: Filtering BPL from powerlines

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 15:44:29 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns998F58EC1147doldridgsprintca@64.59.135.159>
Source record: 37190

Barnard Peters <one@two.com> wrote in news:pan.2007.08.17.04.49.22.352797
@blueplanet:

> Wouldn't it be possible to place a filter at your meter that would shunt
> the BPL signal to ground for the whole neighborhood?

Probably not. But a couple of companies, including Motorola have BPL
systems that do NOT interfere with amateur radio services at all. The
problem seems to be getting regulatory agencies to mandate such systems
rather than the sloppy ones they seem to have been bribed to permit.

When money becomes the political power, then anarchy has arrived. Ultimate
political power in an anarchy is simply feudal. That is to say, whoever
can buy the most firepower eventually gets to rule. You either bow to the
feudal lord or he runs right over you with his army. Or you get a bigger
army of your own. Those are the only real choices and don't ever pretend
it's democratic because it's not and wasn't meant to be. Lacking an army,
your only real recourse is to divine right monarchy.

--
Dave Oldridge+
ICQ 1800667

577. Re: Filtering BPL from powerlines

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 16:10:40 UTC
From: Rick <Ratradio@pacbell.net>
Message-ID: <4Mjxi.14734$eY.12116@newssvr13.news.prodigy.net>
Source record: 37191

There is a way to filter BPL from specific power poles. Its called a
chain saw.
Rick

Barnard Peters wrote:
> Wouldn't it be possible to place a filter at your meter that would shunt
> the BPL signal to ground for the whole neighborhood?

578. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 16:23:30 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa4i2ajve1@news.albasani.net>
Source record: 37192

Dave Oldridge wrote:

> ...

You need a good book on digital error correction algorithms in digital communications.

Unless you have constructed a real rf jammer (white noise really), BPL will eat up any legitimate amateur communications you can throw at it ... however, rumors do prevail, like the one about the tin foil hat.

Regards,
JS

579. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 16:24:34 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <dMOdnW5ENc4hVljbRVnyiAA@pipex.net>
Source record: 37193

> If BPL is in this area, it's going to effect me whether I transmit or
> not,
> if it trashes my receiver.
> It's not naive. I just don't care what they think. I think it's a
> lousy
> system, they approved it, and now they are going to have to live
> with the problems that are sure to come up. I'm not going to be
> changing my operation any time soon.
==========
Here in the UK BPL (or PLC =Power Line Communication as it is called here) is not an issue since ADSL via telphone line) is sufficiently developed be it not everywhere at a 2Mbits/sec or higher speed (as yet).

I have followed ARRL's involvment in 'fighting BPL' and noticed they have tested in/around their HQ a Motorola BPL system that apparently does NOT interfere with HF comms . Other BPL systems are giving a lot of problems .
So there seem to be purely technical issues with BPL as well.
Also it seems to be very doubtful that BPL will be viable as a cost effective HS comms system considering other more viable methods like fibre or community satellite/high power Wifi systems ,the latter particularly promising for rural communities.

Here in the north of Scotland HV pylons (carry trunk fibre optic cable
Frank GM0CSZ / KN6WH

580. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 16:44:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <41gbc35ps7am93l647svskv7huaam1bbmn@4ax.com>
Source record: 37194

On Fri, 17 Aug 2007 14:20:14 +0100, "Mike Kaliski"
<michael.kaliski@tesco.net> wrote:

> An antenna made completely of insulating materials would
>at least reduce the risk of lightning strikes.

Hi Mike,

There are antennas made of insulating materials, why don't you have one already? However, no antenna is made "completely" of insulating material - unless you can replace a gamma feed with fiber optics at HF. ;-)

Let's say you want to work 30M Evanescent Mode (this is the coupling of their work). Build yourself a prism of glass (or other, similar dielectric with n > 1.6) with sides of 400M X 400M X 600M. Aim the long side's face into the sky - if you can move it, that is. Point your beam into one of the smaller faces. Expect a LOT of attenuation. If you want more energy going towards DX, you need to make the prism larger.

If glass is not your cup of tea, it can be replaced with a similar sized prism of a matrix of metal rods (all roughly resonant). This does, of course, present a lightning hazard.

As for the "faster than light," Your DX signal will probably arrive no sooner than it did without the prisms (the "faster than light" only works with retarding mechanisms). This is all like selling dehydrated water (Just add water!).

73's
Richard Clark, KB7QHC

581. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 16:50:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b5kbc39b5jbl1461up18ho5hhaka6su4gq@4ax.com>
Source record: 37195

On Fri, 17 Aug 2007 07:16:21 -0700, John Smith I
<assemblywizard@gmail.com> wrote:

>Mike Kaliski wrote:
>
> > ...
>> If optical photons can tunnel through opaque materials, then why not radio
>> frequency photons? ...
>
>You just can't pose a better question than that, it escapes me how
>anyone can find fault with such a question(s).
>
>Once we deal with the problem of rf waves appearing both as waves and
>photons and get our minds wrapped around how this is (truly understand
>rf), interesting things could happen.

Both posts pretty much ignore that the research WAS done with RF (9
GHZ).

Fellows, try reading the original work rather than the boys from MENSA
comic book editions.

73's
Richard Clark, KB7QHC

582. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 16:58:47 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa4k4e$p3b$1@news.albasani.net>
Source record: 37196

Richard Clark wrote:

> ...
> Both posts pretty much ignore that the research WAS done with RF (9
> GHZ).
>
> Fellows, try reading the original work rather than the boys from MENSA
> comic book editions.
>
> 73's
> Richard Clark, KB7QHC

Richard, I got "your line down"; We already know it all! And, what we don't, you can fill us in on ... heck, just chalk me up as a slow learner! :-)

Regards,
JS

583. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 17:45:02 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <tv2hp4-8tl.ln1@mail.specsol.com>
Source record: 37197

Richard Clark <kb7qhc@comcast.net> wrote:
> On Fri, 17 Aug 2007 07:16:21 -0700, John Smith I
> <assemblywizard@gmail.com> wrote:

> >Mike Kaliski wrote:
> >
> > > ...
> >> If optical photons can tunnel through opaque materials, then why not radio
> >> frequency photons? ...
> >
> >You just can't pose a better question than that, it escapes me how
> >anyone can find fault with such a question(s).
> >
> >Once we deal with the problem of rf waves appearing both as waves and
> >photons and get our minds wrapped around how this is (truly understand
> >rf), interesting things could happen.

> Both posts pretty much ignore that the research WAS done with RF (9
> GHZ).

And the about the only thing new was this was done at RF instead of
optical frequencies as has been done for years.

> Fellows, try reading the original work rather than the boys from MENSA
> comic book editions.

And the background stuff that says this is old news (other than doing
it at RF).

--
Jim Pennino

Remove .spam.sux to reply.

584. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 18:18:08 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fa4op7$15o6$1@f04n12.cac.psu.edu>
Source record: 37198

Mike Kaliski wrote:
> "Cecil Moore" <nospam@w5dxp.com> wrote in message
> news:9j6xi.231$LL7.59@nlpi069.nbdc.sbc.com...
> http://www.telegraph.co.uk/earth/main.jhtml?xml=/earth/2007/08/16/scispeed116.xml
>> --
>> 73, Cecil http://www.w5dxp.com
>
> Seems I got shot down in flames when I mentioned this very topic a couple of
> months ago. Or maybe it was my attempt to try and visualise how this
> phenomenon might take place. :-(
>
> If optical photons can tunnel through opaque materials, then why not radio
> frequency photons? An antenna made completely of insulating materials would
> at least reduce the risk of lightning strikes. :-)

Am I reading the wrong thing? When I click on the link, I get a story
about "We have broken speed of light".

Looks like "We go really fast, lose command of English".

To comment on the what the link has on it, There are some really
fundamental mistakes in it:

What kind of scientist measures "instantaneousnous"? How do you measure
that? What is the margin of error on apparent simultaneous occurances?

How does traveling faster than light allow you to arrive before you
leave?. That would be time reversal, not traveling faster than light.
According to their experiment, you could get there no sooner than
instant you left.

Anything is possible when you get your science news from The Telegraph.
Kinda reminds me of the old DAK catalogs.

I'd like to read their publication on the matter.

And as for tunneling, its been known about for quite some time.

- 73 de Mike KB3EIA -

585. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 20:09:16 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fa4v9c$p6g$1@f04n12.cac.psu.edu>
Source record: 37199

Richard Clark wrote:
> On Fri, 17 Aug 2007 07:16:21 -0700, John Smith I
> <assemblywizard@gmail.com> wrote:
>
>> Mike Kaliski wrote:
>>
>>> ...
>>> If optical photons can tunnel through opaque materials, then why not radio
>>> frequency photons? ...
>> You just can't pose a better question than that, it escapes me how
>> anyone can find fault with such a question(s).
>>
>> Once we deal with the problem of rf waves appearing both as waves and
>> photons and get our minds wrapped around how this is (truly understand
>> rf), interesting things could happen.
>
> Both posts pretty much ignore that the research WAS done with RF (9
> GHZ).
>
> Fellows, try reading the original work rather than the boys from MENSA
> comic book editions.

The original wasn't a whole lot more satisfying,(I almost thought it
was an abstract) but at least it didn't have the touchy feely science of
the Telegraph's report.

- 73 de Mike KB3EIA -

586. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 20:18:26 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fa4vqi$p6k$1@f04n12.cac.psu.edu>
Source record: 37200

John Smith I wrote:
> Richard Clark wrote:
>
> > ...
>> Both posts pretty much ignore that the research WAS done with RF (9
>> GHZ).
>>
>> Fellows, try reading the original work rather than the boys from MENSA
>> comic book editions.
>>
>> 73's
>> Richard Clark, KB7QHC
>
> Richard, I got "your line down"; We already know it all! And, what we
> don't, you can fill us in on ... heck, just chalk me up as a slow
> learner! :-)

I read the original work too, and came to much the same conclusion. I'd put more stock in zero point energy than this little experiment allowing us to get somewhere before we start.

The telegraph's article is a lot more satisfying though, if incorrect.

- 73 de Mike KB3EIA -

587. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 20:37:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3l0cc3ltg2hv78f8am3qih05ahjh199t5m@4ax.com>
Source record: 37201

On Fri, 17 Aug 2007 16:09:16 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

>> Fellows, try reading the original work rather than the boys from MENSA
>> comic book editions.
>
> The original wasn't a whole lot more satisfying,(I almost thought it
>was an abstract) but at least it didn't have the touchy feely science of
>the Telegraph's report.

Hi Mike,

I'm accustomed to material dealing with evanescent waves. I've
alluded to them in other postings here where the wavelength and the
frequency of the energy do not follow classic conversions such as 1 =
f/t. Evanescent waves are one of but many of the energy transfer
mechanisms being turned into something useful at the nano-scale. The
original article cites work done in the audio spectrum ("Beating the
Sound Barrier"), but unless you are versed in the trade, you might
think in terms of Hz, KHz, or MHz. Instead, their region of acoustic
interest is in the THz.

Touchy-feely at the nano level is wholly different as it departs from
Newtonian rules, but doesn't quite delve into Quantum (a middle ground
of the curious where current flow is one electron at a time).

Anyway, back to antennas.

Another, related, "photonic" oddity is found in materials with
negative indices of refraction. Locally, Boeing has done some
investigation into it:
http://www.boeing.com/news/frontiers/archive/2004/august/i_tt.html

This reveals a cube of artificial dielectric with a negative index. It
is also relegated to the microwaves for testing the concepts. I
designed models in EZNEC years ago, but quickly ran out of segments
for all but the simplest prisms.

A negative index of refraction gives you a lens that can focus to an
infinitely small spot (a must have for those doing photolithography in
the nano scale). The kicker is that the lens is flat. And, of
course, it bends rays backwards to expectations (backwards as in to
the other side of the normal, incidence; not reflection).

***** sucker bait follows *******

Now, if we were to split the cube diagonally and repeat the evanescent mode, then maybe we could light up dark matter.

73's
Richard Clark, KB7QHC

588. Re: kelp is good for you

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 21:14:05 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <eZydnUINFbMXklvbnZ2dnUVZ_sytnZ2d@comcast.com>
Source record: 37202
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

<Mark@TayleorRobesin.org> wrote in message
news:u6o6c3d7vlo8evtr3enij12m387itr6ik6@4ax.com...
> On Sun, 12 Aug 2007 14:54:46 -0700, an_old_friend
> <konstans@hotmail.com> wrote:
>
>>On Aug 12, 5:50 pm, "kb9rqz" <kbp...@punce.net> wrote:
>>> 1) I was draft into the US Army.
>>never said that
>>
>>> 2) I is a member of the Chemcal Cops
>>
>>I said in correect gramaur
>>
>>> 3) The military wont let me retire.
>>
>>never said that either
>>
>>> 4) I dosn't serve under the name 'Mark Morgan but that's okay cuz
>>> theFBI,
>>> DOD, and CIA have al todl me I candodit.
>>
>>did not say that either
>>
>>> 5) I is on-the-lam from stalking former marines and fatal
>>> atraction four ex-shemale wife almoney
>>
>>absolutely never said that nor is it true
>>
>>> 6) I was recenty, paying $5/hr. to acess my ISP
>>
>>no not rrecently
>>
>>> 7) I has a 248 IQ, but cant figre out how touse a spel checker.
>>
>>wrong again
>>
>>> 8) I is a bi-sexual Pagan male ham who like to be spanked.
>>
>>true enough
>>
>>> 9) I can't find any action on the military base in Central IL, so I hav
>>> to
>>> ask the peple on th USNET.

>>nope
>>
>>on in 9 oh fake
>
> "one useless man is disgrace 2 become a law firm 3 or more become a
> congress"
> adams
>
> woger you are a Congress all in your own head
>
> http://kb9rqz.bravejournal.com/
>
> G
>
> --
> Posted via a free Usenet account from http://www.teranews.com
>
Why do you insist to continue to post to groups that have nothing to do with
your twisted minds or really care about continued trashing of each other.
For someone claiming to have a IQ<--248 your claim of not knowing how to use
a spellchecker is amazing as you try very hard to misspell words!!

589. Re: Filtering BPL from powerlines

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 21:37:26 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99904D886B051nonenowhere@61.9.191.5>
Source record: 37203

Dave Oldridge <doldridg@leavethisoutshaw.ca> wrote in
news:Xns998F58EC1147doldridgsprintca@64.59.135.159:

> Barnard Peters <one@two.com> wrote in
> news:pan.2007.08.17.04.49.22.352797 @blueplanet:
>
>> Wouldn't it be possible to place a filter at your meter that would
>> shunt the BPL signal to ground for the whole neighborhood?
>
> Probably not. But a couple of companies, including Motorola have BPL
> systems that do NOT interfere with amateur radio services at all. The
> problem seems to be getting regulatory agencies to mandate such
> systems rather than the sloppy ones they seem to have been bribed to
> permit.

Read the ARRL's story on Motorola LV: 'Less than two years after
announcing its Powerline LV Access BPL product, Motorola has decided to
suspend product development and to devote its resources to more promising
markets, industry sources say.' Full story at
http://www.arrl.org/news/stories/2007/04/25/102/?nc=1 .

That is a reduction in focus on Access BPL, and the form with the widest
impact, but that is only one form of the BPL scourge.

Dave, perhaps what you see in me as pessimism is more realism, and it is
born out of working in the telecommunications industry, understanding the
carriage market and the challenges in competetive broadband delivery.

I have also measured BPL emission on the street, analysed measurements by
others and written / reviewed many reports on the impact of BPL
emissions. I have a good understanding of the impact, and the BS of the
'it won't affect me' justication of apathy.

The transformation of ham radio to the province of six hour hams with
their shack on their belt impacts the sustainability of ham radio. They
do not have the knowledge and experience, the credibility to challenge
the threat.

The 'it won't affect me' approach and redneck solutions help to divert
attention from the BPL problem.

BPL might crash and burn of its own accord, and I frequently see people
calling out the failure of a small BPL deployment as evidence, but in the
last few hours I have reviewed a report on ambient noise measurements in
an area for planned BPL deployment in the coming weeks, and the
implementor is no small naive power company business development unit.
BPL remains a serious threat.

Owen

590. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 22:16:30 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa56o5$89k$1@news.albasani.net>
Source record: 37204

Michael Coslo wrote:

> ...
> I read the original work too, and came to much the same conclusion.
> I'd put more stock in zero point energy than this little experiment
> allowing us to get somewhere before we start.
>
> The telegraph's article is a lot more satisfying though, if incorrect.
>
>
> - 73 de Mike KB3EIA -

And just what is your Ph.D. in? I just want to know so when I quote
they know I am just not quoting some guy with an opinion ...

Regards,
JS

591. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 22:26:46 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa57bd$89k$2@news.albasani.net>
Source record: 37205

Cecil Moore wrote:
> http://www.telegraph.co.uk/earth/main.jhtml?xml=/earth/2007/08/16/scispeed116.xml
>

Cecil:

These guys are truly amazing. It is obivious they are nit-picking in an endeavor to make you appear as an idiot; equally obvious is that, they fail every time! However, they do succeed in making complete bozos out of themselves; and, to all appearances, they show no awareness of what they have/are done/doing, how can this be possible? I mean, I know there are a lot of idiots in the world; and I know the extent of "idiot-ism" in much of the masses deserves watching and respect; but, these guys dwarf 'em (your run of the mill idiot, that is!)

Whatever mental disorder these guys have, I am afraid it may be caused by rf--I am thinking of swearing off amateur radio and going wholly with the net--before it is too late!

Regards,
JS

592. Re: Filtering BPL from powerlines

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 22:29:30 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa57gi$89k$3@news.albasani.net>
Source record: 37206

Owen Duffy wrote:

> ...
> BPL might crash and burn of its own accord, and I frequently see people
> calling out the failure of a small BPL deployment as evidence, but in the
> last few hours I have reviewed a report on ambient noise measurements in
> an area for planned BPL deployment in the coming weeks, and the
> implementor is no small naive power company business development unit.
> BPL remains a serious threat.
>
> Owen

Have you ever read, "The Sky is Falling", by Chicken Little? He/she shared much of your same belief system ... read it, it may be worth your time. :-)

Regards,
JS

593. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 23:37:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vbbcc3pq6to4qjs33br8i6ohoo206chkre@4ax.com>
Source record: 37207

On Fri, 17 Aug 2007 15:26:46 -0700, John Smith I
<assemblywizard@gmail.com> wrote:

>an endeavor to make you appear as an idiot

Odd how you choose your frame so carefully. The passive presumption
is truly evocative of wish-fulfillment. Sort of like "I'll hold your
coat while you beat them up" toadyist self contempt.

Got any more charmers like that scribbled in your secret diary?

Try reading the original text instead of relying on the Classics
Comics edition if you want your indignation to bluster more than Rocky
Balboa in a wheelchair.

Yeah, I know this was all for my benefit. ;-0

73's
Richard Clark, KB7QHC

594. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-17 23:51:19 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fa5chn$3pm$1@news.service.uci.edu>
Source record: 37208

John Smith I wrote:

> Whatever mental disorder these guys have, I am afraid it may be caused
> by rf--I am thinking of swearing off amateur radio and going wholly with
> the net--before it is too late!

If you do, please consider swearing off the the amateur radio
newsgroups too while you're at it.

Much appreciated.

ac6xg

595. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 00:53:15 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46c642f8$0$23533$4c368faf@roadrunner.com>
Source record: 37209

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:uJgxi.1008$Oo.978@newssvr17.news.prodigy.net...
> Jimmie D wrote:
>> tunneling doesnt take faster than light speed to explain, only that there
>> are more than three dimensions to space. In some dimension the begining
>> and end was not as far apart as the scientist thought they were. In other
>> words you dont travel faster than light, you just take a short cut.
>
> Beam me up, Scottie, and engage at Warp 6.
> --
> 73, Cecil http://www.w5dxp.com

The universe is probably a lot stranger than you or I think it is.

Jimmie

596. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 00:58:56 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa5g8prlb1@news.albasani.net>
Source record: 37210

Richard Clark wrote:
> On Fri, 17 Aug 2007 15:26:46 -0700, John Smith I
> <assemblywizard@gmail.com> wrote:
>
>> an endeavor to make you appear as an idiot
>
> Odd how you choose your frame so carefully. The passive presumption
> is truly evocative of wish-fulfillment. Sort of like "I'll hold your
> coat while you beat them up" toadyist self contempt.
>
> Got any more charmers like that scribbled in your secret diary?
>
> Try reading the original text instead of relying on the Classics
> Comics edition if you want your indignation to bluster more than Rocky
> Balboa in a wheelchair.
>
> Yeah, I know this was all for my benefit. ;-0
>
> 73's
> Richard Clark, KB7QHC

My text is either true on not, it holds no secret knife, it is the weapon itself. I am sure some may get lost in analysis ...

What I write only looks obvious to me, I simply offer my humble opinion, it is either true, or not ... the world is a much better judge than myself ...

Regards,
JS

597. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 01:06:01 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa5gm2rlb2@news.albasani.net>
Source record: 37211

Jim Kelley wrote:

> ...
> If you do, please consider swearing off the the amateur radio newsgroups
> too while you're at it.
>
> Much appreciated.
>
> ac6xg
>
>

Jim:

:-)

JS

598. BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 01:07:44 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa5gp9rlb3@news.albasani.net>
Source record: 37212

http://www.itbusinessedge.com/blogs/cip/?p=170

Regards,
JS

599. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 01:08:19 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13cchk4nqml9qb2@corp.supernews.com>
Source record: 37214

Jimmie D wrote:

> The universe is probably a lot stranger than you or I think it is.

Yet much less strange than some other people think it is.

Roy Lewallen, W7EL

600. Re: mental help is good for you Mork

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 01:08:43 UTC
From: "Chef@GavrielahHojnacki.org" <konstaan@hotmail.com>
Message-ID: <1187399323.585526.316150@w3g2000hsg.googlegroups.com>
Source record: 37213
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

```
On Aug 17, 5:14?pm, "John Doe" <hgor...@adelphia.net> wrote:
> <M...@TayleorRobesin.org> wrote in message
>
> news:u6o6c3d7vlo8evtr3enij12m387itr6ik6@4ax.com...
>
>
>
> > On Sun, 12 Aug 2007 14:54:46 -0700, an_old_friend
> > <konst...@hotmail.com> wrote:
>
> >>On Aug 12, 5:50 pm, "kb9rqz" <kbp...@punce.net> wrote:
> >>> 1) I was draft into the US Army.
> >>never said that
>
> >>> 2) I is a member of the Chemcal Cops
>
> >>I said in correect gramaur
>
> >>> 3) The military wont let me retire.
>
> >>never said that either
>
> >>> 4) I dosn't serve under the name 'Mark Morgan but that's okay cuz
> >>> theFBI,
> >>> DOD, and CIA have al todl me I candodit.
>
> >>did not say that either
>
> >>> 5) I is on-the-lam from stalking former marines and fatal
> >>> atraction four ex-shemale wife almoney
>
> >>absolutely never said that nor is it true
>
> >>> 6) I was recenty, paying $5/hr. to acess my ISP
>
> >>no not rrecently
>
> >>> 7) I has a 248 IQ, but cant figre out how touse a spel checker.
>
> >>wrong again
>
> >>> 8) I is a bi-sexual Pagan male ham who like to be spanked.
>
```

> >>true enough
>
> >>> 9) I can't find any action on the military base in Central IL, so I hav
> >>> to
> >>> ask the peple on th USNET.
> >>nope
>
> >>on in 9 oh fake
>
> > "one useless man is disgrace 2 become a law firm 3 or more become a
> > congress"
> > adams
>
> > woger you are a Congress all in your own head
>
> >http://kb9rqz.bravejournal.com/
>
> > G
>
> > --
> > Posted via a free Usenet account fromhttp://www.teranews.com
>
> Why do you insist to continue to post to groups that have nothing to do with
> your twisted minds or really care about continued trashing of each other.
> For someone claiming to have a IQ<--248 your claim of not knowing how to use
> a spellchecker is amazing as you try very hard to misspell words!!- Hide quoted text -
>
Don't try to analyze Mork's behavior. He has no explaination or
viable reasons for his actions, except what he makes up in that empty
void between his ears. Apparently, Mork thinks it is perfectly ok to
disrupt the NGs with his flooding and violate everybody else's right
to use the group as intended.

Warning: Mark C. Morgan, kb9rqz, is a general nuisance and NG flooder.
Please make it a point not to work this creep on the air. He is a poor
example of a ham and is not worthy of a contact with any real hams.

601. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 01:09:41 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa5gsurlb4@news.albasani.net>
Source record: 37215

Jimmie D wrote:

> ...
> The universe is probably a lot stranger than you or I think it is.
>
> Jimmie

Well said, and that ain't the half of it; a lot of amateurs are a lot stranger than I am comfortable with! :-)

Regards,
JS

602. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 01:25:43 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa5hqvcmk1@news.albasani.net>
Source record: 37216

Richard Clark wrote:

> ...
> 73's
> Richard Clark, KB7QHC

Yanno, my first response, which preceded this one, was rather cryptic.
This link embodies my meaning:

http://blog.hamdems.org/archives/028648.html

Now, simply think of me as the guy who cries out, "These amateurs wear
NO clothes!"

Regards,
JS

603. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 01:44:42 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <o6jcc3181qeuhesbd5a22a817s5h4ingcn@4ax.com>
Source record: 37217

On Fri, 17 Aug 2007 17:58:56 -0700, John Smith I
<assemblywizard@gmail.com> wrote:

>My text is either true on not, it holds no secret knife, it is the
>weapon itself.

Wow! Harlequin may sue you for copyright violation though. (Do they
have a Quantum Electrodynamics series for young romantics you've been
tipping into? Gives an entirely new spin on tunneling.)

604. Re: Thus it exist ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 01:55:21 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <gksxi.35653$Mu5.35082@newsfe15.phx>
Source record: 37218

"Denny" <k8do@mailblocks.com> wrote in message
news:1187348805.544566.327380@z24g2000prh.googlegroups.com...
>
>
> Well, it is a nice fantasy...
>

Ham radio programs steer 2-axis antenna arrays to follow along the paths of
the seelcted satellite. Hardly fantasy. OM.

605. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 01:56:43 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa5jl3$dd8$3@news.albasani.net>
Source record: 37219

Richard Clark wrote:

> ...
> Wow! Harlequin may sue you for copyright violation though. (Do they
> have a Quantum Electrodynamics series for young romantics you've been
> tipping into? Gives an entirely new spin on tunneling.)

LOL! At least Harlequin doesn't reprint shakespeare!

As happens quite often, I view my "crystal ball" and I must agree to
disagree.

To me, it is quite clear, we have only kludged together "theories" and
equations which we slave with (but, are quite usable till better comes
along), we use these under the burden of great errors and unsolved
riddles ... to others, it may indeed appear as a finished work of art ...

Regards,
JS

606. Re: mental help is good for you Mork

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 05:11:10 UTC
From: Gav <anon@anon>
Message-ID: <162kic.jio.19.1@news.alt.net>
Source record: 37220
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

```
"Chef@GavrielahHojnacki.org" <konstaan@hotmail.com> wrote in message
news:1187399323.585526.316150@w3g2000hsg.googlegroups.com...
> On Aug 17, 5:14?pm, "John Doe" <hgor...@adelphia.net> wrote:
> > <M...@TayleorRobesin.org> wrote in message
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> > news:u6o6c3d7vlo8evtr3enij12m387itr6ik6@4ax.com...
> >
> >
> >
> > > On Sun, 12 Aug 2007 14:54:46 -0700, an_old_friend
> > > <konst...@hotmail.com> wrote:
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> > >>On Aug 12, 5:50 pm, "kb9rqz" <kbp...@punce.net> wrote:
> > >>> 1) I was draft into the US Army.
> > >>never said that
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> > >>> 2) I is a member of the Chemcal Cops
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> > >>I said in correect gramaur
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> > >>> 3) The military wont let me retire.
> >
> > >>never said that either
> >
> > >>> 4) I dosn't serve under the name 'Mark Morgan but that's okay cuz
> > >>> theFBI,
> > >>> DOD, and CIA have al todl me I candodit.
> >
> > >>did not say that either
> >
> > >>> 5) I is on-the-lam from stalking former marines and fatal
> > >>> atraction four ex-shemale wife almoney
> >
> > >>absolutely never said that nor is it true
> >
> > >>> 6) I was recenty, paying $5/hr. to acess my ISP
> >
> > >>no not rrecently
> >
> > >>> 7) I has a 248 IQ, but cant figre out how touse a spel checker.
> >
> > >>wrong again
> >
```

> > >>> 8) I is a bi-sexual Pagan male ham who like to be spanked.
> >
> > >>true enough
> >
> > >>> 9) I can't find any action on the military base in Central IL, so I
hav
> > >>> to
> > >>> ask the peple on th USNET.
> > >>nope
> >
> > >>on in 9 oh fake
> >
> > > "one useless man is disgrace 2 become a law firm 3 or more become a
> > > congress"
> > > adams
> >
> > > woger you are a Congress all in your own head
> >
> > >http://kb9rqz.bravejournal.com/
> >
> > > G
> >
> > > --
> > > Posted via a free Usenet account fromhttp://www.teranews.com
> >
> > Why do you insist to continue to post to groups that have nothing to do
with
> > your twisted minds or really care about continued trashing of each
other.
> > For someone claiming to have a IQ<--248 your claim of not knowing how to
use
> > a spellchecker is amazing as you try very hard to misspell words!!- Hide
quoted text -
> >
> Don't try to analyze Mork's behavior. He has no explaination or
> viable reasons for his actions, except what he makes up in that empty
> void between his ears. Apparently, Mork thinks it is perfectly ok to
> disrupt the NGs with his flooding and violate everybody else's right
> to use the group as intended.
>
> Warning: Mark C. Morgan, kb9rqz, is a general nuisance and NG flooder.
> Please make it a point not to work this creep on the air. He is a poor
> example of a ham and is not worthy of a contact with any real hams.
>
I will take your advice and will NOT ever carry on a QSO with KB9RQZ should
I ever hear him on the bands.
Thank you for the warning.

607. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 07:50:59 UTC
From: Jan Simons PA0SIM <PA0SIMandnospam@amsat.org>
Message-ID: <1187423461.112910@SLIPstream>
Source record: 37221

BPL is may be the best example of unsound engineering.
When you don't see that, may be you are one of the too many managers
with dollar signs in their eyes and without any knowledge.

73 Jan PA0SIM

"John Smith I" <assemblywizard@gmail.com> schreef in bericht
news:fa5gp9rlb3@news.albasani.net...
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

608. Re: Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 08:48:01 UTC
From: "Roger (K8RI)" <validaddress@my.com>
Message-ID: <48cdc39p7gacktj3l2qvca9iksk4lr0uko@4ax.com>
Source record: 37222

On Wed, 15 Aug 2007 13:30:17 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>On Tue, 14 Aug 2007 22:31:58 -0400, Roger (K8RI) wrote:
>
>> A lot depends on the current installation, but you have the VHF/UHF
>> array at 60 feet. Being 10 feet above the top of the tower that is
>> quite a bending moment although to do that I'd assume you have the
>> rotator down inside the tower.
>
>Good afternoon, Roger.
>
>The VHF/UHF "array" is merely a vertical, Diamond X3200. I'm quite
>certain it and the relatively thin wall mast supporting it will break LONG

I think you'll be surprised at how much flexing tht antenna can take.
I've seen the one on the big tower bent over with the top appearing to
be 4 or 5 feet off from vertical. That's a long ways for a 21 foot
tall vertical.

>before the tower does even with no additional guying.

I have two of the big Diamonds up. One is at roughly 30 feet on the
side of the big tower and the other is on top of 20' of 1 1/2" TV
masting on the3 North side of my shop. A third is going up on the big
tower for digtital at roughly 60 feet and the lower one is going to be
moved directly under it.
>
>However, today I started thinking about maybe putting up a 2-element
>SteppIR, mostly because I need to operate on MARS frequencies that are
>a ways outside the 20-meter band. No doubt that becomes a whole 'nother
>ballgame. I'll start a new thread on that topic.
>
Good Luck, es 73

609. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 10:56:56 UTC
From: ml <m@di.net>
Message-ID: <m-F33E04.06565518082007@news.verizon.net>
Source record: 37223

In article <BHgxi.1007$Oo.531@newssvr17.news.prodigy.net>,
Cecil Moore <nospam@w5dxp.com> wrote:

> John Smith I wrote:
> > Cecil Moore wrote:
> >> http://www.telegraph.co.uk/earth/main.jhtml?xml=/earth/2007/08/16/scispeed1
> >> 16.xml
> >
> > This immediately suggests possible and interesting uses in
> > cooling/refrigeration, if this "scientific discovery" holds water ...
>
> Entangled particles may be a tunneling of sorts through
> space-time. It has been proved to my satisfaction that
> reality is non-local.

can't say i fully understand it all , but i really enjoy reading these
posts and at least was able to research and study this material /topics
which usually leads me to stumble on other interesting /related stuff

thanks all

610. FA: 1-Day-Left: 3 Books: HAM RADIO, ARRL ANTENNA BOOK, TUNE IN THE WORLD WITH HAM RADIO, etc.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 12:30:32 UTC
From: Larry <larry@lkjpoiua.com>
Message-ID: <180820070830328483%larry@lkjpoiua.com>
Source record: 37224
Cross-posted to: alt.marketplace.online.ebay,alt.marketplace.books,rec.arts.books.marketplace,alt.ham-radio.marketplace,rec.radio.amateur.antenna

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=320147319976

611. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 14:15:47 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <naDxi.2168$LL7.381@nlpi069.nbdc.sbc.com>
Source record: 37225

John Smith I wrote:
> It is obivious they are nit-picking in an
> endeavor to make you appear as an idiot;

People who say, "Everything is already known
about __________" have removed any doubt about
who is the idiot. :-)
--
73, Cecil http://www.w5dxp.com

612. OT: WiFi antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 14:49:04 UTC
From: Henry <wa0goz@arrl.net>
Message-ID: <67SdnTrgT6dTm1rbnZ2dnUVZ_jidnZ2d@comcast.com>
Source record: 37226

Does anyone have an extra rubber ducky antenna for a PC WiFi card or know where I can get one?

Thanks for the bandwidth.

73

Henry WA0GOZ

613. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 14:54:34 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <JKDxi.6298$4w7.1964@newssvr22.news.prodigy.net>
Source record: 37227

Jimmie D wrote:
> The universe is probably a lot stranger than you or I think it is.

Presumably, since our "local" reality is non-local,
the entire universe may be just another version of
"Flatland". There seems to be a shortcut not only
across space but across time (assuming time actually
exists).
--
73, Cecil http://www.w5dxp.com

614. Re: WiFi antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 16:11:22 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <KSExi.824$4K6.451@trnddc02>
Source record: 37228

"Henry" <wa0goz@arrl.net> wrote in message
news:67SdnTrgT6dTm1rbnZ2dnUVZ_jidnZ2d@comcast.com...
> Does anyone have an extra rubber ducky antenna for a PC WiFi card or know
> where I can get one?
>
> Thanks for the bandwidth.
>
> 73
>
> Henry WA0GOZ

Hi Henry

I have some. I'll send you one of the type designed to fold if that
meets your needs. It'll mate with a reverse polarity SMA like on most
Wireless devices.

Jerry

615. Re: kelp is good for you

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 17:09:15 UTC
From: Mark@TayleorRobesin.org
Message-ID: <3s9ec31he8lgb0csreprirfmkgcd49ergs@4ax.com>
Source record: 37229
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

```
On Fri, 17 Aug 2007 17:14:05 -0400, "John Doe" <hgorden@adelphia.net>
wrote:

>
><Mark@TayleorRobesin.org> wrote in message
>news:u6o6c3d7vlo8evtr3enij12m387itr6ik6@4ax.com...
>> On Sun, 12 Aug 2007 14:54:46 -0700, an_old_friend
>> <konstans@hotmail.com> wrote:
>>
>>>On Aug 12, 5:50 pm, "kb9rqz" <kbp...@punce.net> wrote:
>>>> 1) I was draft into the US Army.
>>>never said that
>>>
>>>> 2) I is a member of the Chemcal Cops
>>>
>>>I said in correect gramaur
>>>
>>>> 3) The military wont let me retire.
>>>
>>>never said that either
>>>
>>>> 4) I dosn't serve under the name 'Mark Morgan but that's okay cuz
>>>> theFBI,
>>>> DOD, and CIA have al todl me I candodit.
>>>
>>>did not say that either
>>>
>>>> 5) I is on-the-lam from stalking former marines and fatal
>>>> atraction four ex-shemale wife almoney
>>>
>>>absolutely never said that nor is it true
>>>
>>>> 6) I was recenty, paying $5/hr. to acess my ISP
>>>
>>>no not rrecently
>>>
>>>> 7) I has a 248 IQ, but cant figre out how touse a spel checker.
>>>
>>>wrong again
>>>
>>>> 8) I is a bi-sexual Pagan male ham who like to be spanked.
>>>
>>>true enough
```

>>>
>>>> 9) I can't find any action on the military base in Central IL, so I hav
>>>> to
>>>> ask the peple on th USNET.
>>>nope
>>>
>>>on in 9 oh fake
>>
>> "one useless man is disgrace 2 become a law firm 3 or more become a
>> congress"
>> adams
>>
>> woger you are a Congress all in your own head
>>
>> http://kb9rqz.bravejournal.com/
>>
>> G
>>
>> --
>> Posted via a free Usenet account from http://www.teranews.com
>>
>Why do you insist to continue to post to groups that have nothing to do with
>your twisted minds or really care about continued trashing of each other.

becuase they responses to libel crossposted there already

>For someone claiming to have a IQ<--248 your claim of not knowing how to use
>a spellchecker is amazing as you try very hard to misspell words!!
the claim I don't know how to use a spell checkeris just another of
the lies of my foe

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

616. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 17:35:05 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <c5Gxi.5347$924.1412@newssvr23.news.prodigy.net>
Source record: 37230

John Smith I wrote:

>> The universe is probably a lot stranger than you or I think it is.
>>
> Well said, and that ain't the half of it; a lot of amateurs are a lot
> stranger than I am comfortable with! :-)

What do you expect? They probably contain strange quarks.
--
73, Cecil http://www.w5dxp.com

617. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 17:39:17 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <99Gxi.46803$Um6.4870@newssvr12.news.prodigy.net>
Source record: 37231

Richard Clark wrote:
> Gives an entirely new spin on tunneling.

Strange quarks have a spin of -1/2
--
73, Cecil http://www.w5dxp.com

618. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 17:42:18 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <_bGxi.46804$Um6.37311@newssvr12.news.prodigy.net>
Source record: 37132

John Smith I wrote:
> To me, it is quite clear, we have only kludged together "theories" and
> equations which we slave with (but, are quite usable till better comes
> along), we use these under the burden of great errors and unsolved
> riddles ... to others, it may indeed appear as a finished work of art ...

Doesn't it make complete sense for a single photon
to be able to pass through two slits at once and
interfere with itself on the other side? Even a
Buckyball made from many carbon atoms can do the
same thing. :-0
--
73, Cecil http://www.w5dxp.com

619. kelp is good for you woger

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 17:52:06 UTC
From: Mark@TayleorRobesin.org
Message-ID: <dbcec35bivf2bm63fl95lk9jvbls20dstj@4ax.com>
Source record: 37133
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

On Fri, 17 Aug 2007 18:08:43 -0700, "Chef@GavrielahHojnacki.org"
<konstaan@hotmail.com> wrote:

>
>Don't try to analyze Mork's behavior.

well it is so simple there is no need to analyse but I respodn to your
libel where you make

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

620. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 18:13:13 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9gdec3tpe28g6rm5kuat1hna1elh6aq4ls@4ax.com>
Source record: 37134

On Sat, 18 Aug 2007 17:39:17 GMT, Cecil Moore <nospam@w5dxp.com>
wrote:

>Richard Clark wrote:
>> Gives an entirely new spin on tunneling.
>
>Strange quarks have a spin of -1/2

And Harlequin has Fabio.

621. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 18:24:35 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46c73961$0$18994$4c368faf@roadrunner.com>
Source record: 37135

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:JKDxi.6298$4w7.1964@newssvr22.news.prodigy.net...
> Jimmie D wrote:
>> The universe is probably a lot stranger than you or I think it is.
>
> Presumably, since our "local" reality is non-local,
> the entire universe may be just another version of
> "Flatland". There seems to be a shortcut not only
> across space but across time (assuming time actually
> exists).
> --
> 73, Cecil http://www.w5dxp.com

I agree and like your flatland anaolgy. I think if we are not careful we can be as narrow-minded about the nature of the universe as those who thought the only elements were earth wind water and fire or Earth was the center of the universe. We are not that much closer to the truth than they were.

Jimmie

622. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 18:42:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8reec3dtkbtpmk1s0i8gfutocau2gbuotf@4ax.com>
Source record: 37136

On Sat, 18 Aug 2007 14:24:35 -0400, "Jimmie D"
<GFENDER@carolina.rr.com> wrote:

>I agree and like your flatland anaolgy. I think if we are not careful we can
>be as narrow-minded about the nature of the universe as those who thought
>the only elements were earth wind water and fire or Earth was the center of
>the universe. We are not that much closer to the truth than they were.

Hi Jimmie,

Their contemporaries thought that trees could enter into their dreams
and explain the mysteries of life - hence the legacy of "knock on
wood" which a lot of this ersatz hero worship correspondence is so
like.

Let's see, a link to a National Enquirer story headlines a story about
a surgeon who grafts a pig's head onto Paris Hilton, and the poster
suddenly crows like a medical authority:
"Amazing how Lister and Pasteur were just so many
country bumpkin scientists!
If Professor Christiaan Barnard was such a whiz
with heart transplants, he would have done this years ago."

73's
Richard Clark, KB7QHC

623. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 19:12:01 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa7gaa$40r$1@news.albasani.net>
Source record: 37137

Jan Simons PA0SIM wrote:
> BPL is may be the best example of unsound engineering.
> When you doni¿½t see that, may be you are one of the too many managers
> with dollar signs in their eyes and without any knowledge.

Well, you just keep saying that now ...

Regards,
JS

624. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 19:18:19 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa7gm3$40r$2@news.albasani.net>
Source record: 37138

Richard Clark wrote:

> ...
> Let's see, a link to a National Enquirer story headlines a story about
> a surgeon who grafts a pig's head onto Paris Hilton, and the poster
> ...
> 73's
> Richard Clark, KB7QHC

Richard:

Now you have my interest!

Did this alleged operation result in Paris being any more attractive to
50+ year old males, such as myself?

Regards,
JS

625. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 19:21:13 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa7grh$40r$3@news.albasani.net>
Source record: 37139

Cecil Moore wrote:

> ... Even a
> Buckyball made from many carbon atoms can do the
> same thing. :-0

Cecil:

Do those Buckyballs come in larger sizes? My wife plays tennis, yanno? :-)

Regards,
JS

626. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 19:29:03 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa7ha7$40r$4@news.albasani.net>
Source record: 37140

Cecil Moore wrote:

> ...
> People who say, "Everything is already known
> about __________" have removed any doubt about
> who is the idiot. :-)

I am in total agreement, it is unfathomable, to me, how any could call that shot different.

But here, in the rec.radio.amateur.antenna.twilight.zone ng, just the EXACT OPPOSITE seems true.

Someone is an idiot, no doubt. If it is me, I certainly hope I can see this shortly and stop making such an idiot out of myself!

If it is the others, I just hope they stop, shortly ...

Regards,
JS

627. Re: Cellular yagi help needed

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 19:46:25 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46c74c8e$0$28813$4c368faf@roadrunner.com>
Source record: 37141
Cross-posted to: alt.cellular-phone-tech,rec.radio.amateur.antenna

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:gbNmi.4641$BI5.3525@trnddc07...
>
> "szilagyic" <chris@groupinfo.com> wrote in message
> news:1184591451.546176.139440@22g2000hsm.googlegroups.com...
>> Hello,
>>
>> Recently we purchased a cellular yagi dual band antenna to help our
>> signal strength on a Sierra 860 AirCard with Cingular/AT&T, in hopes
>> of improving the speed of the card at our home. We are having
>> horrible results and cannot get it to work correctly. The antenna is
>> a CCM brand 24 dB dual band yagi (824-896Mhz & 1870-1950Mhz); it was
>> purchased from here: (
>> http://www.easystreetelectronics.com/index.asp?PageAction=VIEWPROD&ProdID=71
>>). It is attached to a 30 ft RG58U coax cable that runs back to a TNC-
>> to-FME adapter, then to the Sierra card. We tried the antenna at a
>> test location where we know where the tower is at, about 2 miles away,
>> and can get 90% signal strength with the stock antenna there. When we
>> attached the yagi and moved it in small increments to each side until
>> we honed in on the exact spot, the highest signal strength we can get
>> is about 50-60%. I was assuming we should be able to get 100% signal
>> strength easily since the stock antenna already gets 90%.
>>
>> We tried the yagi at another location where we only get about 30%
>> signal strength with the stock antenna. We do not know where the
>> tower is at so we started in one spot and went in 5 degree increments
>> in a complete circle, noting the signal strength at each stop. The
>> highest we were able to get is about 20%.
>>
>> We must be missing something here, as I don't see why the yagi has
>> less signal strength than the stock antenna. I have not tested the 30
>> ft cable or ends yet, but it was factory made and appears to be fine
>> (no kinks, etc). The yagi is mounted on a PVC pole, and the elements
>> of the antenna are vertically oriented, and it the beam is parallel
>> with the ground.
>>
>> Can anybody help us or provide some tips??? Are we using the right
>> antenna? Right now we are completely stumped, and would really like
>> to get this figured out.
>>
>> Thank you very much for all feedback and help on this matter...
>>
>> --

>> Chris
>
>
> Hi Chris
>
> The performance of your "24 dB Yagi" doesnt surprise me. I have doubts
> about the accuracy of the antenna's specs. It wouldnt surprise me to
> learn that the CCM antenna had only 10 dB gain over the "stock" antenna.
> And coax line loss can vary from manufacturer to manufacturer. Some
> brands of RG 58 could have more than 13 dB in the high frequency band.
> It could be very difficult to build an antenna with 24 dB Minimum gain
> thruout the frequency range 824 to 896 MHz and 1870 to 1950 MHz with one
> feed point. A 23 dB "gain" antenna will have a very narrow radiation
> pattern beam width. That would require a fairly large antenna at the low
> frequency end of your band.
>
>
> .
>

I have a yagi made for a radio modem by a reputable manufacturer. Design frequency is near 900Mhz 13db(i/d/?) gain and it iis about 6 ft long, maybe longer. Connection is via a very short piece if 1/4 inch coax which also includes a ferrite bead BALUN. Reccomended connection is via low loss coax.I think it was last used with LMR900, about 100ft. The antena was removed from service due to poor perforamce and replace wiht a parabloic antenna, I belive the gain of this antenna was about 19 db again of uncertain reference. I hope this gives an idea of what a proper idea for the application should be..

Jimmie

628. Marqueer switched from beer enemas to kelp enemas! muwhahahahahahahaha!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 20:30:50 UTC
From: Davey Vile K8MN SUX <davey_vile_k8mn_sux@yahoo.com>
Message-ID: <1187469050.958549.75040@g4g2000hsf.googlegroups.com>
Source record: 37142
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

On Aug 18, 1:52 pm, M...@TayleorRobesin.org wrote:
> On Fri, 17 Aug 2007 18:08:43 -0700, "C...@GavrielahHojnacki.org"
>
> <konst...@hotmail.com> wrote:
>
> >Don't try to analyze Mork's behavior.
>
> well it is so simple there is no need to analyse

Yes, Marqueer, you are in dire need of analysis, psychoanalysis.

>but I respodn to your libel where you make

It's not libel since it's the truth, flooder.

629. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 20:33:01 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3gkec3l3vrt07tg08hlt4v2u1k1cm09402@4ax.com>
Source record: 37143

On Sat, 18 Aug 2007 12:18:19 -0700, John Smith I
<assemblywizard@gmail.com> wrote:

>> Let's see, a link to a National Enquirer story headlines a story about
>> a surgeon who grafts a pig's head onto Paris Hilton, and the poster

>Now you have my interest!
>
>Did this alleged operation result in Paris being any more attractive to
>50+ year old males, such as myself?

Sounds like you are already attracted. The question is, are you ready
to go under the same surgeon's knife to enhance your appeal to her?

Now, there's a test of theory and acclaim being bundled under the
mantle of "news releases!" Volunteer for elective surgery and
elevate this story above the fold in USA Today.

As for antennas, I see none of the dewy-eyed crowd of worshipers
daring to tread the turf of building/modeling/discussing the necessary
glass prism to commemorate this momentous announcement of FTL DXing.
Can we even hope their zeal in this well-spring of faith extends to
pushing a credit card across the display case to buy a magazine about
one?

73's
Richard Clark, KB7QHC

630. Practical HF Digital Voice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-18 23:52:02 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa80nb$7cg$1@news.albasani.net>
Source record: 37144

http://www.arrl.org/tis/info/HTML/digital_voice/index.html

Even the arrl (Angry Retarded Radio Lizards?) sees the writing on the
wall ...

Regards,
JS

631. Re: Marqueer switched from beer enemas to kelp enemas! muwhahahahahahahaha!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 00:01:51 UTC
From: "Chef@GavrielahHojnacki.org" <konstaan@hotmail.com>
Message-ID: <1187481711.542424.323080@r29g2000hsg.googlegroups.com>
Source record: 37145
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

On Aug 18, 4:30?pm, Davey Vile K8MN SUX
<davey_vile_k8mn_...@yahoo.com> wrote:
> On Aug 18, 1:52 pm, M...@TayleorRobesin.org wrote:
>
> >but I respodn to your libel where you make
>
"It's not libel since it's the truth, flooder."

How sweet it is, the truth!

Warning: Mark C. Morgan, kb9rqz, is a general nuisance and amateur NG
flooder.
All amateurs should make it a point not to work this creep on the air.
He is a poor
example of a ham and is not worthy of a contact with any real hams.

632. get kelp woger

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 03:42:38 UTC
From: Mark@TayleorRobesin.org
Message-ID: <b0ffc358pfi3moujsotiutecdot1lu9st7@4ax.com>
Source record: 37146
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

On Sat, 18 Aug 2007 13:30:50 -0700, Davey Vile K8MN SUX
<davey_vile_k8mn_sux@yahoo.com> wrote:

>On Aug 18, 1:52 pm, M...@TayleorRobesin.org wrote:
>> On Fri, 17 Aug 2007 18:08:43 -0700, "C...@GavrielahHojnacki.org"
>>
>> <konst...@hotmail.com> wrote:
>>
>> >Don't try to analyze Mork's behavior.
>>
>> well it is so simple there is no need to analyse
>
>Yes, Marqueer, you are in dire need of analysis, psychoanalysis.

no woger
>
>>but I respodn to your libel where you make
>
>It's not libel since it's the truth, flooder.
no woger you only by barest chance get anything right about me

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

633. Re: Practical HF Digital Voice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 04:11:10 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <ufskp4-fj1.ln1@p400bob.personal.cox.net>
Source record: 37148

Isn't half the fun of HF using ones brain as an organic processor to pull words out of noisy signals? <grin>

Seriously I always wondered why something like PSKnn became so popular when with a bit more code writing on your average PC might have yielded a viable digital voice circuit. Maybe your average ham doesn't want to say much, only caring to exchange RST's for a card! This is actually what deters me from PSK31, most seem to only want a limited contact..

Does anyone know of a sound card/PC system that does digital voice over SSB bandwidths? I note the comment about group delay and other problems using amatuer transceiver equipment. Could not your rigs characteristics be mapped by a "known" station to reduce this problem.

Since we are on the topic, has anyone used PSK31 mobile/moving? Are there phase shift issues to be allowed for due to the physical movement of the station. Probably more of an issue on VHF than HF.. Looking to do some slow PSK/GPS stuff from the car..

Cheers Bob VK2YQA

John Smith I wrote:
> Even the arrl (Angry Retarded Radio Lizards?) sees the writing on the
> wall ...

634. Re: get mental help marger

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 04:38:28 UTC
From: "Chef@GavrielahHojnacki.org" <konstaan@hotmail.com>
Message-ID: <1187498308.106939.232180@g4g2000hsf.googlegroups.com>
Source record: 37147
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

On Aug 18, 11:42?pm, M...@TayleorRobesin.org wrote:
>
> no woger you only by barest chance get anything right about me
>
Could we get that in English please.

Warning: Mark C. Morgan, kb9rqz, is a general nuisance and amateur NG
flooder. All amateurs should make it a point not to work this creep on
the air.
He is a poor example of a ham and is not worthy of a contact with any
real hams.

635. Re: Practical HF Digital Voice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 05:44:07 UTC
From: Tehrasha Darkon <darkon@netins.net>
Message-ID: <pan.2007.08.19.05.44.11@netins.net>
Source record: 37149

On Sat, 18 Aug 2007 23:11:10 -0500, Bob Bob wrote:

> Maybe your average ham doesn't want to
> say much, only caring to exchange RST's for a card! This is actually
> what deters me from PSK31, most seem to only want a limited contact..

I disagree. I have run into a large number of PSKrs who have no trouble
ragchewing. Often with an extensive set of preset keyboard macros.... :/

--Teh

636. Re: Practical HF Digital Voice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 05:53:10 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <bVQxi.62260$vS1.31431@newsfe16.phx>
Source record: 37150

"Tehrasha Darkon" <darkon@netins.net> wrote in message
news:pan.2007.08.19.05.44.11@netins.net...
> On Sat, 18 Aug 2007 23:11:10 -0500, Bob Bob wrote:
>
> > Maybe your average ham doesn't want to
> > say much, only caring to exchange RST's for a card! This is actually
> > what deters me from PSK31, most seem to only want a limited contact..
>
> I disagree. I have run into a large number of PSKrs who have no trouble
> ragchewing. Often with an extensive set of preset keyboard macros.... :/
>
> --Teh

I had a several-minutes QSO on PSK31 and the OM actually thanked me for
not being a "Drive-by QSO." So, the people who are just filling lines in
a logbook aren't the exclusive users.

Just my two cents.

637. Re: Filtering BPL from powerlines

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 06:14:13 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns9990EC6175372doldridgsprintca@64.59.135.159>
Source record: 37151

Owen Duffy <none@no.where> wrote in
news:Xns99904D886B051nonenowhere@61.9.191.5:

> Dave Oldridge <doldridg@leavethisoutshaw.ca> wrote in
> news:Xns998F58EC1147doldridgsprintca@64.59.135.159:
>
>> Barnard Peters <one@two.com> wrote in
>> news:pan.2007.08.17.04.49.22.352797 @blueplanet:
>>
>>> Wouldn't it be possible to place a filter at your meter that would
>>> shunt the BPL signal to ground for the whole neighborhood?
>>
>> Probably not. But a couple of companies, including Motorola have BPL
>> systems that do NOT interfere with amateur radio services at all.
>> The problem seems to be getting regulatory agencies to mandate such
>> systems rather than the sloppy ones they seem to have been bribed to
>> permit.
>
> Read the ARRL's story on Motorola LV: 'Less than two years after
> announcing its Powerline LV Access BPL product, Motorola has decided
> to suspend product development and to devote its resources to more
> promising markets, industry sources say.' Full story at
> http://www.arrl.org/news/stories/2007/04/25/102/?nc=1 .
>
> That is a reduction in focus on Access BPL, and the form with the
> widest impact, but that is only one form of the BPL scourge.
>
> Dave, perhaps what you see in me as pessimism is more realism, and it
> is born out of working in the telecommunications industry,
> understanding the carriage market and the challenges in competetive
> broadband delivery.
>
> I have also measured BPL emission on the street, analysed measurements
> by others and written / reviewed many reports on the impact of BPL
> emissions. I have a good understanding of the impact, and the BS of
> the 'it won't affect me' justication of apathy.
>
> The transformation of ham radio to the province of six hour hams with
> their shack on their belt impacts the sustainability of ham radio.
> They do not have the knowledge and experience, the credibility to
> challenge the threat.
>
> The 'it won't affect me' approach and redneck solutions help to divert
> attention from the BPL problem.

>
> BPL might crash and burn of its own accord, and I frequently see
> people calling out the failure of a small BPL deployment as evidence,
> but in the last few hours I have reviewed a report on ambient noise
> measurements in an area for planned BPL deployment in the coming
> weeks, and the implementor is no small naive power company business
> development unit. BPL remains a serious threat.

Oh, I'm not downplaying it as a threat. It's just one more symptom,
though of what has gone wrong in our world. It used to be that "money
talk's; bullshit walks" was the adage. Now it's "money bullshits and
everyone else is supposed to bow down and kiss its feet."

--
Dave Oldridge+
ICQ 1800667

638. Re: Filtering BPL from powerlines

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 06:15:54 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns9990ECAA92300doldridgsprintca@64.59.135.159>
Source record: 37152

Rick <Ratradio@pacbell.net> wrote in news:4Mjxi.14734$eY.12116
@newssvr13.news.prodigy.net:

> There is a way to filter BPL from specific power poles. Its called a
> chain saw.
> Rick
>
> Barnard Peters wrote:
>> Wouldn't it be possible to place a filter at your meter that would shunt
>> the BPL signal to ground for the whole neighborhood?

Actually, from a purely engineering efficiency point of view, getting it up there around 2-6 ghz would be the cost effective solution. You need less power and what power you do put on the wire tends to stay quite close to it for long distances....plus there's tons more spectrum available.

--
Dave Oldridge+
ICQ 1800667

639. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 06:19:25 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns9990ED42EC68Ddoldridgsprintca@64.59.135.159>
Source record: 37153

John Smith I <assemblywizard@gmail.com> wrote in news:fa4i2ajve1
@news.albasani.net:

> Dave Oldridge wrote:
>
> > ...
>
> You need a good book on digital error correction algorithms in digital
> communications.
>
> Unless you have constructed a real rf jammer (white noise really), BPL
> will eat up any legitimate amateur communications you can throw at it
> ... however, rumors do prevail, like the one about the tin foil hat.

So how is it gonna eat up having its receiver saturated? I'm pretty familiar with digital comms and, with the exception of some pretty slow speed stuff designed for weak signal work, most of it is not very good unless you have a really solid signal-to-noise ratio. I'm just saying that if it's getting out to my antenna that loud, then my kilowatt is gonna have a fair chance at saturating the thing's receiver. And the more noise they make, the more I'm apt to have to use the kilowatt to shout over them.

Of course in our current enforcement situation here, I'd probably simply be told to stand down and have to go to great legal lengths to appeal the ruling.

--
Dave Oldridge+
ICQ 1800667

640. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 06:46:46 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa8p0n$d5s$1@news.albasani.net>
Source record: 37154

Dave Oldridge wrote:
> John Smith I <assemblywizard@gmail.com> wrote in news:fa4i2ajve1
> @news.albasani.net:
>
>> Dave Oldridge wrote:
>>
>>> ...
>> You need a good book on digital error correction algorithms in digital
>> communications.
>>
>> Unless you have constructed a real rf jammer (white noise really), BPL
>> will eat up any legitimate amateur communications you can throw at it
>> ... however, rumors do prevail, like the one about the tin foil hat.
>
> So how is it gonna eat up having its receiver saturated? I'm pretty
> familiar with digital comms and, with the exception of some pretty slow
> speed stuff designed for weak signal work, most of it is not very good
> unless you have a really solid signal-to-noise ratio. I'm just saying
> that if it's getting out to my antenna that loud, then my kilowatt is
> gonna have a fair chance at saturating the thing's receiver. And the
> more noise they make, the more I'm apt to have to use the kilowatt to
> shout over them.
>
> Of course in our current enforcement situation here, I'd probably simply
> be told to stand down and have to go to great legal lengths to appeal the
> ruling.
>

Digital is not analog, when adverse conditions have made an analog
signal totally unusable, a digital signal, most likely, may still be
achieving 100% error free data transfer--it is just the nature of the beast.

The "intelligence" of the software controlling the data transmission(s)
is the single most important factor--as logic would dictate. Even under
almost total saturation (it would be virtually impossible for 100%
saturation, baring hooking the kw+ rig directly to the power lines) of
the BPL signal some type of heterodyne would be occurring with the KW
signal. Since digital is simply detecting an ON/OFF signal, in
conjunction with spacing/length of these, an on/off signal is still
detectable in this heterodyne--given the software is aware and capable
of reading this signal and switching "modes" to do so, no harm is done
to the data ... and without doubt, new error correction methods will
also develop as BPL grows and hf-rf-terrorist-hams challenge this system
... <LOL!>

Digital is magnitudes more robust than analog, again owing to the very nature of the beast and the simplicity of the on/off, pulse width, timing nature of the signal.

Regards,
JS

641. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 07:14:46 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fa8ql8$d5s$2@news.albasani.net>
Source record: 37155

John Smith I wrote:

> ...

Or, to sum up the previous post, digital, like cw, will get through when
nothing else will ... or, have you ever copied cw as a heterodyne on
some key clowns jamming signal?

Regards,
JS

642. "Buddistick" and MFJ-1622

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 07:33:07 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <TmSxi.25092$6z6.22993@newsfe1-gui.ntli.net>
Source record: 37156

I'm in the process of trying to help a local with an antenna problem. He lives in a ground floor appartment and can't get a fixed outside antenna.

I'm thinking of something on the lines of the Buddistick and MFJ-1622, although ideally a home made version and a hidden counterpoise run down to the ground and tucked away. A small bracket would be fitted to the window frame (or near to it) and the antenna would be removed when not in use. He only runs QRP type power so EMI is probably not an issue.

Comments, other ideas, please?

--
73
Brian, G8OSN
www.g8osn.org.uk

Now your amateur licence is free, why not send at least £15 per year to
support the
Radio Communications Foundation or STELAR?

643. How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 16:28:32 UTC
From: mcclements@gmail.com
Message-ID: <1187540912.064738.6170@g4g2000hsf.googlegroups.com>
Source record: 37157

Hello,

I bought some no name RG-59/U coax (RG-59/U-SP-95 Made in the USA). I went to cut and tune a 1/4WL matching section for 3.8Mhz. I cut the coax a little longer because I intended to tune it with my MFJ259B or.LP100 exactly to the design frequency. I have a 50 Ohm dummyload that actually is about 54 Ohms @ 3.8Mhz. Plugging the numbers into ON4UN's program for calculating impedance along a coax line: Given the coax is 75 Ohms and the load is 54 Ohms, the program reported that if the line was a 1/4WL long the impedance at the source end would be about 105+j0 Ohms.

However my actual measurement with both the MFJ259B and LP100 showed an impedance of 74 + j0 Ohms.

http://remote.wu2x.com:8888/lee/quarter-wave-xfrmer-75-meters.jpg

I plugged in a few numbers into ON4UN program and calculated it would take coax that had a characteristic impedance of 64 Ohms to see the transformation that I am seeing.

Is there any error in my logic here? If this coax really is 64 Ohms, then I'd like to find something that really is closer to 75 Ohms so I can achieve the 2:1 ratio that I intended.I still have another 100 feet of it and can do more tests with the tools I have on hand.

73,
Scott, WU2X

644. MI5 Persecution: Fitted up 26/4/96 (496)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 16:37:48 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07071916374798@4ax.com>
Source record: 37158
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Subject: Re: MI5? Please can someone explain what's going on here?
Newsgroups: uk.misc
References: <4l1khm$4cn@utopia.hacktic.nl> <4l2lhj$6h6@bignews.shef.ac.uk>
Organization: Toronto Free-Net
Distribution:

David Stretch (dds@leicester.ac.uk) wrote:
: In article <19960418.000817.55@hotch.hotch.demon.co.uk>,
: Iain L M Hotchkies <iain@hotch.demon.co.uk> wrote:
: >The (remote) possibility remains that 'Mike Corley' is either
: >not schizophrenic (but is 'pretending' to be so) or 'he' is
: >a product of a number of persons (?psychology students).

: Given other ways in which I have seen people exploit some of The Internet's
: capabilities to disrupt or indulge in sophistry, or to exploit a medium
: that resembles speech without the non-verbal and intonation cues, etc
: as a means of denigrating others, I question your use, albeit in quotes,
: of the word "remote". I'm not saying it isn't remote and therefore it is
: great, I'm just saying that I don't think we can easily classify it as
: remote, moderate, or great.

I think you can build up quite a good picture based on what someone says
and on their posting patterns. I don't think "The Internet" (capitals, no
less) is as opaque a medium as you make it out to be.

: It is not easy to determine the validity of all information on The
: Internet without making use of extra supplementary information.

: We do have the problem, pointed out by someone else, of the possibly
: "too perfect" textbook characteristics of what is being posted.

I explained that one, but I don't mind explaining it again (you don't
mind having it explained again to you, do you now?). The reason my
"symptoms" are such a perfect fit to the textbook is because the people
causing the campaign "fitted me up" in such a way that what they did
would resemble the symptoms of schizophrenia. Hence TV, radio, other
media, people in the streets etc. By a fortunate coincidence (for them)
these mthods of harassment are the ones which offer easiest channels of
access (for them).

It's really quite neat. All it takes is for people to start believing
that the "symptoms" aren't symptoms but reality, though, and the house of
cards collapses in a heap. And there are _lots_ of people now who knoiw
full well what has gone on.

: If harrassment by email, etc, has happened by someone out of the country,
: can a complaint be made that results in arrest or whatever upon that
: person's entry into the country? An interesting point which Mike may be
: able to inform us about, as he's said he will be in the UK in a few weeks
: time.

Picture the scene at the airport;
"I arrest you for being Mike Corley and mailbombing people"

"But my name isn't Corley. Who he? Mailbombing isn't illegal is it? You'd
have to lock up a lot of people if sending annoying email was a crime"

"Er....."

: --
: David Stretch: Greenwood Institute of Child Health, Univ. of Leicester, UK.
: dds@leicester.ac.uk Phone:+44 (0)116-254-6100 Fax:+44 (0)116-254-4127
==========

: context-free parts of articles, conversations and things-on-the-TV and
: assume they are meant for you. Mike, this is called paranoia.

But that's the way real abuse works, too. People interject words and
phrases into what they say which they know will have meaning for the listener.

And sometimes, they make it obvious. The very first evening of my job in
Oxford, we went for a drink with the technical director, and a couple
of other employees. The TD said in an "as-if" aside to one of the others,
"Is this the bloke who's been on TV?" (he said it directly in front of
me, and obviously meant mke to hear him saying it). The other person
replied, "Yes, I think so".

I think the subtext of what the TD said was "Why are they bothering with
him? He's so insignificant, why would they possibly want to spend the
resources going after him and putting all that expensive technology in
his home, when there must be much better targets?". The Technical
Director was given to sometimes disrespecting people, you see, and in my
case he couldn't see the point of anyone expending money on harassing me.

==========

Subject: Re: Treatment of Schizophrenia
Newsgroups: uk.misc,uk.legal,uk.politics,alt.politics.british
Followup-To: uk.misc,uk.legal,uk.politics,alt.politics.british
References: <153321Z22041996@anon.penet.fi> <4lge6r$p00@news.ox.ac.uk>
Organization: Toronto Free-Net
Distribution:

Illtud Daniel (idaniel@jesus.ox.ac.uk) wrote:
: Probably 'cos you come across as reasoned & articulate, it's a pity
: about the other stuff :)

Veracity is so unreasonable.

: >>pps. You should still see a doc again Mike.
: >
: >Doing so. Trouble is, all this mental-illness stuff provides camouflage
: >for the harassment, which is real. It alows people who otherwise would
: >consider the harassment seriously to disregard it. It makes conversations
: >with a lawyer or police brief when otherwise it would merit discussion.

: The point is that there are two possibilities happening here-

: 1. There's a large conspiracy of people out to get you, for no
: other reason than that they have the means to do so, and that
: it involves a lot of the Media & a proportion of the public

: 2. You (who admit to having some headspace problems) are suffering
: from acute paranoid schizophrenia.

: Possibility #1 is _possible_, but would be unprecendented (OTOH,
: how would we know?), unfeasible, and many other things beginning
: with _un_ which I can't think of at the moment. Besides, if there
: was something going on, chances are some of us here would know
: about it, and I'm convinced that nobody does.

"Unprecedented" hits the nail on the head. It _is_ unprecedented, but we
have only just reached the technical stage at which it is feasible, and
we know video-spying is done to other people (NB the Diana-Hewitt
episode) and is a routine tool of security agencies.

Perhaps what is unprecedented is not the technical side, but the social
manipulation of many people by a concealed element in what other
countries would be called the secret police. The most disturbing element
is the degree to which people allow themselves to be unquestioningly
manipulated by an evil element within the state.

496

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

645. marqueer morgan moron

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 16:58:45 UTC
From: an old fiend <kbprqueer@punce.net>
Message-ID: <46c86ab5$0$4422$88260bb3@free.teranews.com>
Source record: 37159
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

"John Doe" <hgorden@adelphia.net> wrote:
> <Mark@TayleorRobesin.org> wrote in message
> news:u6o6c3d7vlo8evtr3enij12m387itr6ik6@4ax.com...
> > On Sun, 12 Aug 2007 14:54:46 -0700, an_old_friend
> > <konstans@hotmail.com> wrote:
> >
> >>On Aug 12, 5:50 pm, "kb9rqz" <kbp...@punce.net> wrote:
> >>> 1) I was draft into the US Army.
> >>never said that
> >>
> >>> 2) I is a member of the Chemcal Cops
> >>
> >>I said in correect gramaur
> >>
> >>> 3) The military wont let me retire.
> >>
> >>never said that either
> >>
> >>> 4) I dosn't serve under the name 'Mark Morgan but that's okay cuz
> >>> theFBI,
> >>> DOD, and CIA have al todl me I candodit.
> >>
> >>did not say that either
> >>
> >>> 5) I is on-the-lam from stalking former marines and fatal
> >>> atraction four ex-shemale wife almoney
> >>
> >>absolutely never said that nor is it true
> >>
> >>> 6) I was recenty, paying $5/hr. to acess my ISP
> >>
> >>no not rrecently
> >>
> >>> 7) I has a 248 IQ, but cant figre out how touse a spel checker.
> >>
> >>wrong again
> >>
> >>> 8) I is a bi-sexual Pagan male ham who like to be spanked.
> >>
> >>true enough
> >>
> >>> 9) I can't find any action on the military base in Central IL, so I
> >>> hav to

> >>> ask the peple on th USNET.
> >>nope
> >>
> >>on in 9 oh fake
> >
> > "one useless man is disgrace 2 become a law firm 3 or more become a
> > congress"
> > adams
> >
> > woger you are a Congress all in your own head
> >
> > http://kb9rqz.bravejournal.com/
> >
> > G
> >
> > --
> > Posted via a free Usenet account from http://www.teranews.com
> >
> Why do you insist to continue to post to groups that have nothing to do
> with your twisted minds or really care about continued trashing of each
> other. For someone claiming to have a IQ<--248 your claim of not knowing
> how to use a spellchecker is amazing as you try very hard to misspell
> words!!
>
>
with the punce gotcha he wonder why I simple don't bother to ty impoving my
spelling do u hav anyting cognet two say?

--
no good indeed goes unpunced

--
Posted via a free Usenet account from http://www.teranews.com

646. MI5 Persecution: Bernard Levin 1/6/96 (1719)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 17:17:08 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07071917170729@4ax.com>
Source record: 37160
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Subject: Re: "FANATIC'S FARE FOR THE COMMON MAN"
Newsgroups: uk.misc,uk.media,uk.legal,uk.politics.misc
Followup-To: uk.misc,uk.media,uk.legal,uk.politics.misc
References: <Ds0L1o.BMF.0.bloor@torfree.net> <ADCF291096681F4E@cara.demon.co.uk>
Organization: Toronto Free-Net
Distribution:

Peter Ceresole (peter@cara.demon.co.uk) wrote:
: In article <Ds0L1o.BMF.0.bloor@torfree.net>,
: bu765@torfree.net (Mike Corley) quoted a typical, overblown Bernard Levin
: piece, which sounds exactly like any number of other pieces by Levin over
: the past thirty years.

: He then goes on to draw an anguished parallel with a totally unrelated
: incident that had happened between him and a friend a few days earlier.

It is in the same style as his other pieces, but it's so close to what
actually happened a few days previously, that it's completely reasonable
to assume that someone told Levin about the meeting, hammed it up a
little bit and motivated him to write that article.

Look at the parallels;

1. "madman running loose about London"

2. it's about a meeting which took place recently

3. the police are called (he must be controlled, however much that
consumes in resources)

4. he might be violent, approach with caution, yes we're laughing but
really we're afraid of him, or is it perhaps our own propaganda that
we're letting manipulate us

5. he "bursts into tears, and swears it's all true - and it is" a very
exaggerated impression of the conclusion of that meeting

Don't worry if you don't believe me, neither my friend to whom I
explained this nor my GP believe me either (until the friend found out
otherwise!). If someone just presented this to you as I am presenting it
now then I wouldn't find it credible (most likely), so it's not until you
actually find out it's true that you can find it credible. And by then
it's too late, because they've got you in their trap and explained how
"funny" the abuse is.

1719

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------>>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

647. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 17:20:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fqugc39l4ut8cepkn686rh7d6jjh427hlu@4ax.com>
Source record: 37161

On Sun, 19 Aug 2007 16:28:32 -0000, mcclements@gmail.com wrote:

>However my actual measurement with both the MFJ259B and LP100 showed
>an impedance of 74 + j0 Ohms.

Hi Scott,

Unless both ends are completely shielded (which is to ask: Is the load
a shielded load?), then you need to choke things.

A quick test would be to take the load end of the line and coil it 8 -
12 turns around a 6 inch cylinder. Does this change your impedance
reading? You will need this choke for your antenna anyway, so plan on
something like it.

73's
Richard Clark, KB7QHC

648. get kelp

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 17:32:56 UTC
From: Mark@TayleorRobesin.org
Message-ID: <nlvgc3t0o5f35qki4vkm4iv15lkkifoms6@4ax.com>
Source record: 37162
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

On Sat, 18 Aug 2007 21:38:28 -0700, "Chef@GavrielahHojnacki.org"
<konstaan@hotmail.com> wrote:

>On Aug 18, 11:42?pm, M...@TayleorRobesin.org wrote:
>>
>> no woger you only by barest chance get anything right about me
>>
>Could we get that in English please.
>

it is in english

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

649. get kelp

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 17:37:20 UTC
From: Mark@TayleorRobesin.org
Message-ID: <vtvgc39u5lseov6hvovc0ac2ssnp647nsm@4ax.com>
Source record: 37163
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

On Sun, 19 Aug 2007 12:58:45 -0400, "an old fiend"
<kbprqueer@punce.net> wrote:

>

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

650. MI5 Persecution: Fitted up 26/4/96 (496)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 17:43:56 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07071917435584@4ax.com>
Source record: 37164
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Subject: Re: MI5? Please can someone explain what's going on here?
Newsgroups: uk.misc
References: <4l1khm$4cn@utopia.hacktic.nl> <4l2lhj$6h6@bignews.shef.ac.uk>
Organization: Toronto Free-Net
Distribution:

David Stretch (dds@leicester.ac.uk) wrote:
: In article <19960418.000817.55@hotch.hotch.demon.co.uk>,
: Iain L M Hotchkies <iain@hotch.demon.co.uk> wrote:
: >The (remote) possibility remains that 'Mike Corley' is either
: >not schizophrenic (but is 'pretending' to be so) or 'he' is
: >a product of a number of persons (?psychology students).

: Given other ways in which I have seen people exploit some of The Internet's
: capabilities to disrupt or indulge in sophistry, or to exploit a medium
: that resembles speech without the non-verbal and intonation cues, etc
: as a means of denigrating others, I question your use, albeit in quotes,
: of the word "remote". I'm not saying it isn't remote and therefore it is
: great, I'm just saying that I don't think we can easily classify it as
: remote, moderate, or great.

I think you can build up quite a good picture based on what someone says
and on their posting patterns. I don't think "The Internet" (capitals, no
less) is as opaque a medium as you make it out to be.

: It is not easy to determine the validity of all information on The
: Internet without making use of extra supplementary information.

: We do have the problem, pointed out by someone else, of the possibly
: "too perfect" textbook characteristics of what is being posted.

I explained that one, but I don't mind explaining it again (you don't
mind having it explained again to you, do you now?). The reason my
"symptoms" are such a perfect fit to the textbook is because the people
causing the campaign "fitted me up" in such a way that what they did
would resemble the symptoms of schizophrenia. Hence TV, radio, other
media, people in the streets etc. By a fortunate coincidence (for them)
these mthods of harassment are the ones which offer easiest channels of
access (for them).

It's really quite neat. All it takes is for people to start believing
that the "symptoms" aren't symptoms but reality, though, and the house of
cards collapses in a heap. And there are _lots_ of people now who knoiw
full well what has gone on.

: If harrassment by email, etc, has happened by someone out of the country,
: can a complaint be made that results in arrest or whatever upon that
: person's entry into the country? An interesting point which Mike may be
: able to inform us about, as he's said he will be in the UK in a few weeks
: time.

Picture the scene at the airport;
"I arrest you for being Mike Corley and mailbombing people"

"But my name isn't Corley. Who he? Mailbombing isn't illegal is it? You'd
have to lock up a lot of people if sending annoying email was a crime"

"Er....."

: --
: David Stretch: Greenwood Institute of Child Health, Univ. of Leicester, UK.
: dds@leicester.ac.uk Phone:+44 (0)116-254-6100 Fax:+44 (0)116-254-4127
==========

: context-free parts of articles, conversations and things-on-the-TV and
: assume they are meant for you. Mike, this is called paranoia.

But that's the way real abuse works, too. People interject words and
phrases into what they say which they know will have meaning for the listener.

And sometimes, they make it obvious. The very first evening of my job in
Oxford, we went for a drink with the technical director, and a couple
of other employees. The TD said in an "as-if" aside to one of the others,
"Is this the bloke who's been on TV?" (he said it directly in front of
me, and obviously meant mke to hear him saying it). The other person
replied, "Yes, I think so".

I think the subtext of what the TD said was "Why are they bothering with
him? He's so insignificant, why would they possibly want to spend the
resources going after him and putting all that expensive technology in
his home, when there must be much better targets?". The Technical
Director was given to sometimes disrespecting people, you see, and in my
case he couldn't see the point of anyone expending money on harassing me.

==========

Subject: Re: Treatment of Schizophrenia
Newsgroups: uk.misc,uk.legal,uk.politics,alt.politics.british
Followup-To: uk.misc,uk.legal,uk.politics,alt.politics.british
References: <153321Z22041996@anon.penet.fi> <4lge6r$p00@news.ox.ac.uk>
Organization: Toronto Free-Net
Distribution:

Illtud Daniel (idaniel@jesus.ox.ac.uk) wrote:
: Probably 'cos you come across as reasoned & articulate, it's a pity
: about the other stuff :)

Veracity is so unreasonable.

: >>pps. You should still see a doc again Mike.
: >
: >Doing so. Trouble is, all this mental-illness stuff provides camouflage
: >for the harassment, which is real. It alows people who otherwise would
: >consider the harassment seriously to disregard it. It makes conversations
: >with a lawyer or police brief when otherwise it would merit discussion.

: The point is that there are two possibilities happening here-

: 1. There's a large conspiracy of people out to get you, for no
: other reason than that they have the means to do so, and that
: it involves a lot of the Media & a proportion of the public

: 2. You (who admit to having some headspace problems) are suffering
: from acute paranoid schizophrenia.

: Possibility #1 is _possible_, but would be unprecendented (OTOH,
: how would we know?), unfeasible, and many other things beginning
: with _un_ which I can't think of at the moment. Besides, if there
: was something going on, chances are some of us here would know
: about it, and I'm convinced that nobody does.

"Unprecedented" hits the nail on the head. It _is_ unprecedented, but we
have only just reached the technical stage at which it is feasible, and
we know video-spying is done to other people (NB the Diana-Hewitt
episode) and is a routine tool of security agencies.

Perhaps what is unprecedented is not the technical side, but the social
manipulation of many people by a concealed element in what other
countries would be called the secret police. The most disturbing element
is the degree to which people allow themselves to be unquestioningly
manipulated by an evil element within the state.

496

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
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651. with the punce gotcha I indeed hav curage

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 18:17:51 UTC
From: an old fiend <kbprqueer@punce.net>
Message-ID: <46c87d40$0$16393$88260bb3@free.teranews.com>
Source record: 37165
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

two throw too homo out teh window aftar they indeed cornhol me.

--
no good indeed goes unpunced

do u han anyting cognet two say?

--
Posted via a free Usenet account from http://www.teranews.com

652. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 20:19:32 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns9991878EDD3A5doldridgsprintca@64.59.135.159>
Source record: 37166

John Smith I <assemblywizard@gmail.com> wrote in
news:fa8p0n$d5s$1@news.albasani.net:

> Dave Oldridge wrote:
>> John Smith I <assemblywizard@gmail.com> wrote in news:fa4i2ajve1
>> @news.albasani.net:
>>
>>> Dave Oldridge wrote:
>>>
>>>> ...
>>> You need a good book on digital error correction algorithms in
>>> digital communications.
>>>
>>> Unless you have constructed a real rf jammer (white noise really),
>>> BPL will eat up any legitimate amateur communications you can throw
>>> at it ... however, rumors do prevail, like the one about the tin
>>> foil hat.
>>
>> So how is it gonna eat up having its receiver saturated? I'm pretty
>> familiar with digital comms and, with the exception of some pretty
>> slow speed stuff designed for weak signal work, most of it is not
>> very good unless you have a really solid signal-to-noise ratio. I'm
>> just saying that if it's getting out to my antenna that loud, then my
>> kilowatt is gonna have a fair chance at saturating the thing's
>> receiver. And the more noise they make, the more I'm apt to have to
>> use the kilowatt to shout over them.
>>
>> Of course in our current enforcement situation here, I'd probably
>> simply be told to stand down and have to go to great legal lengths to
>> appeal the ruling.
>>
>
> Digital is not analog, when adverse conditions have made an analog
> signal totally unusable, a digital signal, most likely, may still be
> achieving 100% error free data transfer--it is just the nature of the
> beast.

Actually, I've found that, except for very slow data rate stuff, digital
signals require a BETTER signal-to-noise than analog to be readable. And
there is no partial readability with most of the commercially-used
digital modes. That is to say you either have error-free transmission or
none whatever.

> The "intelligence" of the software controlling the data
> transmission(s) is the single most important factor--as logic would

> dictate. Even under almost total saturation (it would be virtually
> impossible for 100% saturation, baring hooking the kw+ rig directly to
> the power lines) of the BPL signal some type of heterodyne would be
> occurring with the KW signal. Since digital is simply detecting an
> ON/OFF signal, in conjunction with spacing/length of these, an on/off
> signal is still detectable in this heterodyne--given the software is
> aware and capable of reading this signal and switching "modes" to do
> so, no harm is done to the data ... and without doubt, new error
> correction methods will also develop as BPL grows and
> hf-rf-terrorist-hams challenge this system ... <LOL!>

You cannot recover data with a modem whose input transistor is biased off
by rectified RF. I know this. I've tried it.

> Digital is magnitudes more robust than analog, again owing to the very
> nature of the beast and the simplicity of the on/off, pulse width,
> timing nature of the signal.

The only real advantage digital has is its error-correction algorithms.
Those can do very good work when they actually have enough data to work
with. But once the data recovery by the the very ANALOG device that is
receiving the signals drops below their threshold, then the recovery
becomes terrible. Some modems are better than others. My old Telebit
19.2K could suck 1200 baud recovery out of a phone line you couldn't talk
on. But give it a couple of volts of RF in the mix and it would drop
stone cold dead. And BPL has the "disadvantage" of not being able to
filter our frequencies AND use them at the same time. At worst, I'd
drive the BPL machinery to other parts of the band from where I was
working....

--
Dave Oldridge+
ICQ 1800667

653. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 20:21:31 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns999187E456CAdoldridgsprintca@64.59.135.159>
Source record: 37167

John Smith I <assemblywizard@gmail.com> wrote in news:fa8ql8$d5s$2
@news.albasani.net:

> John Smith I wrote:
>
> > ...
>
> Or, to sum up the previous post, digital, like cw, will get through when
> nothing else will ... or, have you ever copied cw as a heterodyne on
> some key clowns jamming signal?

Lots of times. My CW error-correcting hardware is excellent, is always on,
and conveniently located in my head.

But you're missing my point. A modem is always an analog device. And if
it's listening on a frequency with a loud signal on it, then it can be
saturated by that signal. I've not seen many that could copy the
heterodyne. Mostly they just stop giving any recovery at all.

--
Dave Oldridge+
ICQ 1800667

654. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 20:40:44 UTC
From: mcclements@gmail.com
Message-ID: <1187556044.820069.182900@r34g2000hsd.googlegroups.com>
Source record: 37168

Richard,

You asked if the load is shielded. I was using a MFJ dummy load and the resistor is inside a metal enclosure. Not sure if this mets your shielding criteria.

I did have twelve #31 ferrite beads (1.125"X.0.5") on both the input and output end of the cable, so I can say for sure that aspect was taken care of. I didn't notice any changing values whenever I would move the coax around or grab onto either.

-Scott, WU2X

On Aug 19, 1:20 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Sun, 19 Aug 2007 16:28:32 -0000, mccleme...@gmail.com wrote:
> >However my actual measurement with both the MFJ259B and LP100 showed
> >an impedance of 74 + j0 Ohms.
>
> Hi Scott,
>
> Unless both ends are completely shielded (which is to ask: Is the load
> a shielded load?), then you need to choke things.
>
> A quick test would be to take the load end of the line and coil it 8 -
> 12 turns around a 6 inch cylinder. Does this change your impedance
> reading? You will need this choke for your antenna anyway, so plan on
> something like it.
>
> 73's
> Richard Clark, KB7QHC

655. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 20:49:02 UTC
From: gsm@mendelson.com
Message-ID: <slrnfchb50.qsv.gsm@cable.mendelson.com>
Source record: 37169

Dave Oldridge wrote:
> At worst, I'd
> drive the BPL machinery to other parts of the band from where I was
> working....

At worst some neighbor would get pissed off that you are messing up
their Internet and start a FUD campaign to force you off the air for
"dangerous radiation".

It happened here with the cell phone companies and as a side effect
anyone with more than 20 watts output needs to get their station
certified as safe. I know there was a chance of hams getting a
blanket exemption, but I don't know if it was approved or not.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

656. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 21:01:53 UTC
From: tclay@qmc.ph.msstate.edu
Message-ID: <86ir7b2q7y.fsf@qmc.ph.msstate.edu>
Source record: 37170

>I bought some no name RG-59/U coax (RG-59/U-SP-95 Made in the USA). I
>went to cut and tune a 1/4WL matching section for 3.8Mhz. I cut the
>coax a little longer because I intended to tune it with my MFJ259B
>or.LP100 exactly to the design frequency. I have a 50 Ohm dummyload
>that actually is about 54 Ohms @ 3.8Mhz. Plugging the numbers into
>ON4UN's program for calculating impedance along a coax line: Given the
>coax is 75 Ohms and the load is 54 Ohms, the program reported that if
>the line was a 1/4WL long the impedance at the source end would be
>about 105+j0 Ohms.

How long is the coax (in feet)? Are you sure you didn't actually cut
a half wavelength?

Tor
N4OGW

657. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 21:07:06 UTC
From: tclay@qmc.ph.msstate.edu
Message-ID: <86ejhz2pz9.fsf@qmc.ph.msstate.edu>
Source record: 37171

>How long is the coax (in feet)? Are you sure you didn't actually cut
>a half wavelength?

Which wouldn't make sense either, then you should get 54 ohms.

Tor
N4OGW

658. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 21:35:30 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99924D345D8CCnonenowhere@61.9.191.5>
Source record: 37172

mcclements@gmail.com wrote in news:1187540912.064738.6170
@g4g2000hsf.googlegroups.com:

Scott,

The inconsistency you describe seems to lie in one or more of your instrument, the coax, or your test setup.

I am not sure whether you are solving a coax problem, or validating the LP100.

The impedance plot certainly clears away questions about whether you have properly accounted for velocity factor. The phase plot has a strangely flattened minimum.

I wonder about your confidence in the 54 ohm load, and your answers to Richard about choking the cable suggests something non-ideal.

You could try a test with s/c or o/c stub (or both), so eliminating the 54 ohm load. Of course, in such a test, the line loss becomes more important. It also tests your instrument at extreme mismatch, so you might want to validate it on o/c, s/c, and some reactive 100:1 loads using known coax sections.

Back to the loss thing, the line loss calculator at http://www.vk1od.net/tl/tllc.php uses a more sophisticated line model than any other calculators I have seen, and contains data for a hundred or so of the most common commercial lines. It also calculates the expected impedance transformation for the line.

For example, it suggests that a 6m length of Belden B9204 (RG59/U type) o/c line at 3.8MHz has an input Z of 0.84-j84.91.

BTW, have you stripped a bit of cable down to see visually if appears physically sound. Common problems I have encountered have included unevenly woven braid, unevenly laid strands in centre conductor (though yours should be solid), un-centred centre conductor, air inclusions in the dielectric.

As I said, I am not sure that the LP100 has been validated and the focus is entirely on the particular coax.

Owen

659. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 21:45:16 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99924EDC42766nonenowhere@61.9.191.5>
Source record: 37173

gsm@mendelson.com (Geoffrey S. Mendelson) wrote in
news:slrnfchb50.qsv.gsm@cable.mendelson.com:

...
> At worst some neighbor would get pissed off that you are messing up
> their Internet and start a FUD campaign to force you off the air for
> "dangerous radiation".

Interesting that you mention that.

Some of our good friends in Tasmania started a FUD campaign to scare ordinary electricity consumers about the electromagnetic raidation hazard of electric blankets when they were BPL 'enhanced'.

I think that the last thing that we hams, who radiate much higher field levels than BPL, would want to do is excite paranoia over EMR hazards.

Didn't we learn anything from the campaign against the visual amenity of mobile phone infrastructure, they played the EMR FUD like it was an art form.

If we were ever required to prove the compliance of our stations with EMR standards using surveys from accredited test houses, we would be off the air economically, and ham radio would no longer be an experimental activity.

There is some steady, sound engineering / scientific work going on to discover and reveal the impact of BPL, it is small in scale but IMHO credible and ongoing. Uninformed and redneck comment from the amateur community makes the job just that much harder.

Owen

660. get kelp

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 23:26:30 UTC
From: Mark@TayleorRobesin.org
Message-ID: <tckhc3hd9173d6ppobrcboqvjdqoftd4pa@4ax.com>
Source record: 37174
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

On Sun, 19 Aug 2007 14:17:51 -0400, "an old fiend"
<kbprqueer@punce.net> wrote:

>
fake

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

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Posted via a free Usenet account from http://www.teranews.com

661. Re: get help morkie.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 23:30:10 UTC
From: "Chef@GavrielahHojnacki.org" <konstaan@hotmail.com>
Message-ID: <1187566210.706111.299370@22g2000hsm.googlegroups.com>
Source record: 37175
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

On Aug 19, 1:32?pm, M...@TayleorRobesin.org wrote:
> On Sat, 18 Aug 2007 21:38:28 -0700, "C...@GavrielahHojnacki.org"
>
> <konst...@hotmail.com> wrote:
> >On Aug 18, 11:42?pm, M...@TayleorRobesin.org wrote:
>
> >> no woger you only by barest chance get anything right about me
>
> >Could we get that in English please.
>
> it is in english
>
Are you sure???

bwahahaha!

662. get kelp

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 23:38:45 UTC
From: Mark@TayleorRobesin.org
Message-ID: <l3lhc3h35jn81qqri8e48v5tftmffu3su6@4ax.com>
Source record: 37176
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

On Sun, 19 Aug 2007 16:30:10 -0700, "Chef@GavrielahHojnacki.org"
<konstaan@hotmail.com> wrote:

>On Aug 19, 1:32?pm, M...@TayleorRobesin.org wrote:
>> On Sat, 18 Aug 2007 21:38:28 -0700, "C...@GavrielahHojnacki.org"
>>
>> <konst...@hotmail.com> wrote:
>> >On Aug 18, 11:42?pm, M...@TayleorRobesin.org wrote:
>>
>> >> no woger you only by barest chance get anything right about me
>>
>> >Could we get that in English please.
>>
>> it is in english
>>
>Are you sure???
>

entirely

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

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Posted via a free Usenet account from http://www.teranews.com

663. Difference between models of MFJ-931

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-19 23:45:07 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.19.23.45.04.82020@from.qrz.com>
Source record: 37177

Anybody know what the differences are between these two models of MFJ-931
artificial ground?

http://cgi.ebay.com/MFJ-931-Artificial-RF-Ground-New_W0QQitemZ290151133276QQihZ019QQcategoryZ4671QQssPageNameZWDVWQQrdZ1QQcmdZViewItem

http://cgi.ebay.com/NEW-MFJ-MFJ-931-Artificial-RF-Ground-w-Manual-NR_W0QQitemZ330157223601QQihZ014QQcategoryZ4671QQssPageNameZWDVWQQrdZ1QQcmdZViewItem

They are both called "MFJ-931" but as you can see they have different
control layouts.

The former is the one that's currently listed on the MFJ website.

I'm just wondering if they are equivalent electrically and MFJ just
decided to move the controls around a bit.

664. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 00:33:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r0ohc390j8cd8c6qqg7555gurcs28d4ato@4ax.com>
Source record: 37178

On Sun, 19 Aug 2007 20:40:44 -0000, mcclements@gmail.com wrote:

>You asked if the load is shielded. I was using a MFJ dummy load and
>the resistor is inside a metal enclosure. Not sure if this mets your
>shielding criteria.
>
>I did have twelve #31 ferrite beads (1.125"X.0.5") on both the input
>and output end of the cable, so I can say for sure that aspect was
>taken care of. I didn't notice any changing values whenever I would
>move the coax around or grab onto either.

Hi Scott,

That seems adequate to the task of differentiating any problem of
common mode intruding into the measurement.

Another easy test would be to simply frequency sweep the terminated
line until you found the 100 Ohms you expect. This may take you well
out of the Ham bands. When you do find 100 Ohms (without reactance)
you can then ratiometrically adjust the length to the required
frequency (which would suggest your problem was probably misjudging
the velocity factor of the cable).

73's
Richard Clark, KB7QHC

665. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 00:58:18 UTC
From: mcclements@gmail.com
Message-ID: <1187571498.519257.225380@r29g2000hsg.googlegroups.com>
Source record: 37179

On Aug 19, 5:35 pm, Owen Duffy <n...@no.where> wrote:
> I am not sure whether you are solving a coax problem, or validating the
> LP100.

Well, the LP100 and MFJ259B readings are virtually identical. That
gives me some confidence in both instruments. The goal was to tune a
matching section for my loop. Which BTW,
I did and it is working fine. However, the SWR is only reaching a
minimum of 1.6:1 because I didn't get the full 2:1 step down ratio.
Now, I am not going to lose sleep over that, but it seemed like a good
opportunity to understand what happens outside the textbook.

> The impedance plot certainly clears away questions about whether you have
> properly accounted for velocity factor. The phase plot has a strangely
> flattened minimum.

Yeah, I was surprised by that too - but I was pleased to see that - if
it is true. I know the loop won't be bandwidth limited by my matching
section.

> I wonder about your confidence in the 54 ohm load, and your answers to
> Richard about choking the cable suggests something non-ideal.

Confidence in that it really is 54 Ohms? Well, I wouldn't bet my life
on it, but all my instruments seem to agree that its 54 Ohms. I
choked the cable because it was driving me crazy. No seriously, I was
building the matching section to use on my loop, so you have to slide
those ferrite beads on before you solder on the PL259s. I didn't put
them on because I thought they were necessary when I measured
the matching section, they just happened to be there at the time.

> You could try a test with s/c or o/c stub (or both), so eliminating the
> 54 ohm load. Of course, in such a test, the line loss becomes more
> important. It also tests your instrument at extreme mismatch, so you
> might want to validate it on o/c, s/c, and some reactive 100:1 loads
> using known coax sections.

I measured it with an open end with the MFJ and it had zero reactance
right in the range the LP100 showed it not have any reactance.

I have had good luck with Belden, so maybe I'll order some of that in
75 Ohms and see if its any different.

-Scott, WU2X

666. Re: Practical HF Digital Voice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 03:23:56 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <46C9094C.7020902@bellsouff.net>
Source record: 37180

Sal M. Onella wrote:
> "Tehrasha Darkon" <darkon@netins.net> wrote in message
> news:pan.2007.08.19.05.44.11@netins.net...
>> On Sat, 18 Aug 2007 23:11:10 -0500, Bob Bob wrote:
>>
>>> Maybe your average ham doesn't want to
>>> say much, only caring to exchange RST's for a card! This is actually
>>> what deters me from PSK31, most seem to only want a limited contact..
>> I disagree. I have run into a large number of PSKrs who have no trouble
>> ragchewing. Often with an extensive set of preset keyboard macros.... :/
>>
>> --Teh
>
> I had a several-minutes QSO on PSK31 and the OM actually thanked me for
> _not_ being a "Drive-by QSO." So, the people who are just filling lines in
> a logbook aren't the exclusive users.
>
> Just my two cents.
>
>

I just ordered a digital squawk box made by AOR. I'm interested in staying in contact with my wife's mobile when she is "on the road" hawking the business' wares at quilt fests and the like. Granted, we use the cellphone most of the time, but there are places in the USA that still are not covered by such devices, or the system is so overloaded that you are lucky to get through. (this is my excuse for spending the money)

I like all kinds of contacts, short, long, etc. I'm not fixated on any one type of qso.

I want to enjoy the digital technology while it is still new, at least it is new to me. I felt the same way about RTTY, Amtor, Pactor, Pactor II and PSK 31 (I haven't used the latter yet).

Hopefully, the alleged improvement in voice communications at low power will be just what I was looking for. I said hopefully. <G>

Ed, NM2K

667. Re: "Buddistick" and MFJ-1622

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 03:30:59 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <46C90AF3.7070303@bellsouff.net>
Source record: 37181

Brian Reay wrote:
> I'm in the process of trying to help a local with an antenna problem. He
> lives in a ground floor appartment and can't get a fixed outside antenna.
>
> I'm thinking of something on the lines of the Buddistick and MFJ-1622,
> although ideally a home made version and a hidden counterpoise run down to
> the ground and tucked away. A small bracket would be fitted to the window
> frame (or near to it) and the antenna would be removed when not in use. He
> only runs QRP type power so EMI is probably not an issue.
>
> Comments, other ideas, please?
>

Which bands are the most important to him?

If it is HF and if he is into CW or the digital modes, the old box-fan looking magnetic mode antennas worked fairly well, considering. Nothing would have to be outside for that to work well.

I operated for quite a few years from a ground floor apartment. CW and the digital modes were by far the easiest on which to make numerous contacts. Of course, this is obvious to anyone with a little bit of experience, but, just in case, I thought I would mention it.

If your friend just has to talk on 75 phone, he would be better off building a gorilla-strong mobile station in his car, assuming he has one. No one can give you any serious crap about operating from the vehicle. If they do, due to RFI, tell them that antennas make less interference when elevated, so that the answer would be to give your friend permission to run a random wire along the peak of the roof and to then feed it with twin lead. Then help the other folks in the building install filters (gratis - of course) and to have them call him if they have problems. That's what I did and the manager eventually let me put a centerfed dipole fed with twinlead on top of the roof. It worked great and only cost me a few dollars for clamp-on ferrite toroids (Radio Shack). Of course, I was running 100 watts or less during the evenings when folks were watching TV on the apartment owned CATV system.

There are answers, you just have to be creative. Operating digital modes or CW really does make this a much easier feat to accomplish.

Ed, NM2K

668. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 04:22:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13ci5o4t4gsvj7f@corp.supernews.com>
Source record: 37082

Most of the important points have been well covered, but let me add a general observation:

Loss will skew any measurement toward the characteristic impedance of the cable. This is intuitively evident, since if the cable is lossy enough, you'll see its characteristic impedance at the input regardless of what's connected to the other end.

So when you say you're seeing 74 ohms when you should be seeing 105, I'd bet without further evidence that the cable has more loss than your model thinks it has.

Roy Lewallen, W7EL

669. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 05:16:38 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1187586998.924765.198440@x40g2000prg.googlegroups.com>
Source record: 37083

On Aug 19, 9:28 am, mccleme...@gmail.com wrote:
> Hello,
>
> I bought some no name RG-59/U coax (RG-59/U-SP-95 Made in the USA). I
> went to cut and tune a 1/4WL matching section for 3.8Mhz. I cut the
> coax a little longer because I intended to tune it with my MFJ259B
> or.LP100 exactly to the design frequency. I have a 50 Ohm dummyload
> that actually is about 54 Ohms @ 3.8Mhz. Plugging the numbers into
> ON4UN's program for calculating impedance along a coax line: Given the
> coax is 75 Ohms and the load is 54 Ohms, the program reported that if
> the line was a 1/4WL long the impedance at the source end would be
> about 105+j0 Ohms.
>
> However my actual measurement with both the MFJ259B and LP100 showed
> an impedance of 74 + j0 Ohms.
>
> http://remote.wu2x.com:8888/lee/quarter-wave-xfrmer-75-meters.jpg
>
> I plugged in a few numbers into ON4UN program and calculated it would
> take coax that had a characteristic impedance of 64 Ohms to see the
> transformation that I am seeing.
>
> Is there any error in my logic here? If this coax really is 64 Ohms,
> then I'd like to find something that really is closer to 75 Ohms so I
> can achieve the 2:1 ratio that I intended.I still have another 100
> feet of it and can do more tests with the tools I have on hand.
>
> 73,
> Scott, WU2X

My rule-of-thumb is that I shouldn't be surprised if the actual
impedance of coax is anywhere within ten percent of the nominal
value. A while back I went looking for precision 50 ohm coax to be
used in a test system that among other things does a calibration of
test instruments, and the impedance of the coax really does matter.
Even cables that cost several hundred dollars for a one or two meter
length (that's admittedly with connectors attached...) didn't
guarantee impedance closer than a couple ohms out of 50.

Add to that that I just went looking for typical loss specs for RG-59-
type cable on the web and the first one I looked at lists it as 70 ohm
line, not 75. Although the expected impedance you calculated is for
75 ohm line with no loss, adding a dB loss doesn't change things all

that much, certainly not enough by itself to account for your reading.

Seems like with your impedance analyzer, you could pretty easily find the impedance and the loss of your line, and use those in your formulas to see if the performance is what you expect. Have you measured the line with the far end shorted and with it open? Assuming accurate measurements, the line impedance will be the square root of the product of those two measured values.

Then there's also the possibility that your impedance measuring device isn't all that accurate at some impedances....

Cheers,
Tom

670. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 05:27:57 UTC
From: mcclements@gmail.com
Message-ID: <1187587677.403087.77630@d55g2000hsg.googlegroups.com>
Source record: 37084

Roy - Your comment made me double check my work. I was using ON4UN's
software and I was entering the estimated loss at my design frequency.
Then I realized when I cranked up the loss (to see the effect clearly)
that it wasn't doing anything with impedance along the line. And then
I visited Owen's link for the second time and plugged in the details
from my cable. I must have done something wrong the first time -
because let me tell you it was dead nuts what I saw (Zo 75.01-j1.45
). Case closed!

-Scott, WU2X

Parameters
Transmission Line Belden 9204 (RG-59/U)
Code B9204
Data source Belden
Frequency 3.800 MHz
Length 42.700 feet
Zload 54.00+j0.00
Yload 0.018519+j0.000000
Results
Zo 75.01-j1.45
Velocity Factor 0.660
Length 89.94 °, 0.250
Line Loss (matched) 0.269 dB
Line Loss 0.279 dB
Efficiency 93.77%
Zin 102.11-j3.74
Yin 0.009780+j0.000359
, , RL, VSWR (source end) 1.53e-1-j8.49e-3, 0.153 -3.2°, 16.3dB,
1.36
, , RL, VSWR (load end) -1.63e-1+j9.38e-3, 0.163 176.7°, 15.7dB,
1.39
7.24e-4+j3.68e-2
k1, k2 3.19e-6, 1.79e-11
Loss model source data frequency range 10.000 MHz - 1000.000 MHz
Correlation coefficient (r) 0.999661

671. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 05:45:34 UTC
From: mcclements@gmail.com
Message-ID: <1187588734.476663.103350@w3g2000hsg.googlegroups.com>
Source record: 37085

Well ***Opps****. I took out my contacts already. And I read the cable Zo as the impedance at the input end. As you can see it says 102.11-j3.74. I am still going to search out some new RG-59/U...

-Scott, WU2X

672. MI5 Persecution: Fitted up 26/4/96 (496)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 05:56:05 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072009522582@4ax.com>
Source record: 37090
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Subject: Re: MI5? Please can someone explain what's going on here?
Newsgroups: uk.misc
References: <4l1khm$4cn@utopia.hacktic.nl> <4l2lhj$6h6@bignews.shef.ac.uk>
Organization: Toronto Free-Net
Distribution:

David Stretch (dds@leicester.ac.uk) wrote:
: In article <19960418.000817.55@hotch.hotch.demon.co.uk>,
: Iain L M Hotchkies <iain@hotch.demon.co.uk> wrote:
: >The (remote) possibility remains that 'Mike Corley' is either
: >not schizophrenic (but is 'pretending' to be so) or 'he' is
: >a product of a number of persons (?psychology students).

: Given other ways in which I have seen people exploit some of The Internet's
: capabilities to disrupt or indulge in sophistry, or to exploit a medium
: that resembles speech without the non-verbal and intonation cues, etc
: as a means of denigrating others, I question your use, albeit in quotes,
: of the word "remote". I'm not saying it isn't remote and therefore it is
: great, I'm just saying that I don't think we can easily classify it as
: remote, moderate, or great.

I think you can build up quite a good picture based on what someone says
and on their posting patterns. I don't think "The Internet" (capitals, no
less) is as opaque a medium as you make it out to be.

: It is not easy to determine the validity of all information on The
: Internet without making use of extra supplementary information.

: We do have the problem, pointed out by someone else, of the possibly
: "too perfect" textbook characteristics of what is being posted.

I explained that one, but I don't mind explaining it again (you don't
mind having it explained again to you, do you now?). The reason my
"symptoms" are such a perfect fit to the textbook is because the people
causing the campaign "fitted me up" in such a way that what they did
would resemble the symptoms of schizophrenia. Hence TV, radio, other
media, people in the streets etc. By a fortunate coincidence (for them)
these mthods of harassment are the ones which offer easiest channels of
access (for them).

It's really quite neat. All it takes is for people to start believing
that the "symptoms" aren't symptoms but reality, though, and the house of
cards collapses in a heap. And there are _lots_ of people now who knoiw
full well what has gone on.

: If harrassment by email, etc, has happened by someone out of the country,
: can a complaint be made that results in arrest or whatever upon that
: person's entry into the country? An interesting point which Mike may be
: able to inform us about, as he's said he will be in the UK in a few weeks
: time.

Picture the scene at the airport;
"I arrest you for being Mike Corley and mailbombing people"

"But my name isn't Corley. Who he? Mailbombing isn't illegal is it? You'd
have to lock up a lot of people if sending annoying email was a crime"

"Er....."

: --
: David Stretch: Greenwood Institute of Child Health, Univ. of Leicester, UK.
: dds@leicester.ac.uk Phone:+44 (0)116-254-6100 Fax:+44 (0)116-254-4127
==========

: context-free parts of articles, conversations and things-on-the-TV and
: assume they are meant for you. Mike, this is called paranoia.

But that's the way real abuse works, too. People interject words and
phrases into what they say which they know will have meaning for the listener.

And sometimes, they make it obvious. The very first evening of my job in
Oxford, we went for a drink with the technical director, and a couple
of other employees. The TD said in an "as-if" aside to one of the others,
"Is this the bloke who's been on TV?" (he said it directly in front of
me, and obviously meant mke to hear him saying it). The other person
replied, "Yes, I think so".

I think the subtext of what the TD said was "Why are they bothering with
him? He's so insignificant, why would they possibly want to spend the
resources going after him and putting all that expensive technology in
his home, when there must be much better targets?". The Technical
Director was given to sometimes disrespecting people, you see, and in my
case he couldn't see the point of anyone expending money on harassing me.

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Subject: Re: Treatment of Schizophrenia
Newsgroups: uk.misc,uk.legal,uk.politics,alt.politics.british
Followup-To: uk.misc,uk.legal,uk.politics,alt.politics.british
References: <153321Z22041996@anon.penet.fi> <4lge6r$p00@news.ox.ac.uk>
Organization: Toronto Free-Net
Distribution:

Illtud Daniel (idaniel@jesus.ox.ac.uk) wrote:
: Probably 'cos you come across as reasoned & articulate, it's a pity
: about the other stuff :)

Veracity is so unreasonable.

: >>pps. You should still see a doc again Mike.
: >
: >Doing so. Trouble is, all this mental-illness stuff provides camouflage
: >for the harassment, which is real. It alows people who otherwise would
: >consider the harassment seriously to disregard it. It makes conversations
: >with a lawyer or police brief when otherwise it would merit discussion.

: The point is that there are two possibilities happening here-

: 1. There's a large conspiracy of people out to get you, for no
: other reason than that they have the means to do so, and that
: it involves a lot of the Media & a proportion of the public

: 2. You (who admit to having some headspace problems) are suffering
: from acute paranoid schizophrenia.

: Possibility #1 is _possible_, but would be unprecendented (OTOH,
: how would we know?), unfeasible, and many other things beginning
: with _un_ which I can't think of at the moment. Besides, if there
: was something going on, chances are some of us here would know
: about it, and I'm convinced that nobody does.

"Unprecedented" hits the nail on the head. It _is_ unprecedented, but we
have only just reached the technical stage at which it is feasible, and
we know video-spying is done to other people (NB the Diana-Hewitt
episode) and is a routine tool of security agencies.

Perhaps what is unprecedented is not the technical side, but the social
manipulation of many people by a concealed element in what other
countries would be called the secret police. The most disturbing element
is the degree to which people allow themselves to be unquestioningly
manipulated by an evil element within the state.

496

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

673. Re: kelp is good for you

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 06:13:56 UTC
From: Mark@TayleorRobesin.org
Message-ID: <74cic3t7sdp5s7d97covcvr4osoejg816i@4ax.com>
Source record: 37086
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

On Sun, 12 Aug 2007 14:54:46 -0700, an_old_friend
<konstans@hotmail.com> wrote:

>On Aug 12, 5:50 pm, "kb9rqz" <kbp...@punce.net> wrote:
>> 1) I was draft into the US Army.
>never said that
>
>> 2) I is a member of the Chemcal Cops
>
>I said in correect gramaur
>
>> 3) The military wont let me retire.
>
>never said that either
>
>> 4) I dosn't serve under the name 'Mark Morgan but that's okay cuz theFBI,
>> DOD, and CIA have al todl me I candodit.
>
>did not say that either
>
>> 5) I is on-the-lam from stalking former marines and fatal
>> atraction four ex-shemale wife almoney
>
>absolutely never said that nor is it true
>
>> 6) I was recenty, paying $5/hr. to acess my ISP
>
>no not rrecently
>
>> 7) I has a 248 IQ, but cant figre out how touse a spel checker.
>
>wrong again
>
>> 8) I is a bi-sexual Pagan male ham who like to be spanked.
>
>true enough
>
>> 9) I can't find any action on the military base in Central IL, so I hav to
>> ask the peple on th USNET.
>nope
>
>on in 9 oh fake

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

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Posted via a free Usenet account from http://www.teranews.com

674. MI5 Persecution: Bernard Levin 1/6/96 (1719)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 06:20:45 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072010170491@4ax.com>
Source record: 37091
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Subject: Re: "FANATIC'S FARE FOR THE COMMON MAN"
Newsgroups: uk.misc,uk.media,uk.legal,uk.politics.misc
Followup-To: uk.misc,uk.media,uk.legal,uk.politics.misc
References: <Ds0L1o.BMF.0.bloor@torfree.net> <ADCF291096681F4E@cara.demon.co.uk>
Organization: Toronto Free-Net
Distribution:

Peter Ceresole (peter@cara.demon.co.uk) wrote:
: In article <Ds0L1o.BMF.0.bloor@torfree.net>,
: bu765@torfree.net (Mike Corley) quoted a typical, overblown Bernard Levin
: piece, which sounds exactly like any number of other pieces by Levin over
: the past thirty years.

: He then goes on to draw an anguished parallel with a totally unrelated
: incident that had happened between him and a friend a few days earlier.

It is in the same style as his other pieces, but it's so close to what
actually happened a few days previously, that it's completely reasonable
to assume that someone told Levin about the meeting, hammed it up a
little bit and motivated him to write that article.

Look at the parallels;

1. "madman running loose about London"

2. it's about a meeting which took place recently

3. the police are called (he must be controlled, however much that
consumes in resources)

4. he might be violent, approach with caution, yes we're laughing but
really we're afraid of him, or is it perhaps our own propaganda that
we're letting manipulate us

5. he "bursts into tears, and swears it's all true - and it is" a very
exaggerated impression of the conclusion of that meeting

Don't worry if you don't believe me, neither my friend to whom I
explained this nor my GP believe me either (until the friend found out
otherwise!). If someone just presented this to you as I am presenting it
now then I wouldn't find it credible (most likely), so it's not until you
actually find out it's true that you can find it credible. And by then
it's too late, because they've got you in their trap and explained how
"funny" the abuse is.

1719

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------>>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

675. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 06:27:51 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13cid39fvvdsk28@corp.supernews.com>
Source record: 37087

Sorry I don't have the time to dig into this more deeply right now. I'm sure Owen has done a great job in estimating loss, but here are some things to think about:

1. Belden 9204, like a lot of other 75 ohm cables, has a copper-plated steel center conductor for strength. At 3.8 MHz, depending on the copper thickness, current might be entering the steel. If it is, the loss will be a lot more than a simple model for solid copper would predict. I notice that the statement at the bottom of the data you posted says "Loss model source data frequency range 10.000 - 1000.000 MHz". You're well below that. A good reason for a lower limit on the model would be not accounting for current penetrating into the steel.

2. Some common RG-59 type cables have stranded center conductors and tin plating. Both increase the loss. More importantly, stranding results in much thinner copper for a given percentage of wire diameter of copper cladding.

3. A logical way for a cable manufacturer to cut costs is to put a thinner copper cladding on the center conductor. This would have no effect on the performance at VHF and above, where the cable is most likely to be used. So thin copper wouldn't surprise me.

The only way to really know the loss is to measure it. And this might not be the reason for any apparent error. But it might be. As Tom said, though, 10, or even 15% deviation from nominal isn't unusual.

Let me relate a story. Years ago, I came across a very large surplus quantity of approximately 0.1" diameter 75 ohm cable. It was just before Field Day, and because it looked to be in good physical condition, I measured off 100 feet, put a couple of BNC connectors on it, and tossed it into the pack as feedline for the 40 meter antenna. (I backpack my gear on Field Day, so weight is a major consideration.) Field Day went ok, but it was one of those years when we were just at the other stations' noise level, requiring a lot of repeats, QRZs, etc. Afterward, my FD partner was saying that all we needed was another 2 or 3 dB gain on 40, and we'd do a lot better. I agreed. Not too long afterward, I was measuring the impedance of a folded dipole through a half or full wave of that 75 ohm coax (since I had a lot of it), and was getting bizarre results. And that's when I first learned of the importance of cable loss on impedance transformation. I had been assuming lossless cable for my calculations of load Z given input Z, but got suspicious that loss might play a role. When I modified by equations to account for loss, I was surprised at how much difference even a little loss made. (As it turns

out, loss makes more difference when the load Z is far from the cable Z0, as it was in this case, than when they're about the same.) I put more and more loss into the formula until I got about what I expected for load Z, given the input Z I was measuring. 4 dB at 7 MHz! A quick measurement with the wattmeter confirmed that the cable did indeed have that much loss. The problem was the thinness of the copper cladding on the very small steel center conductor strands. Even though the cladding was a substantial portion of the wire diameter, it was still very thin because of the tiny wire diameter. At our next sked, I told my FD partner that I'd figured out a way to get a couple more dB out of our 40 meter antenna. . .

Roy Lewallen, W7EL

676. MI5 Persecution: alt.fan.mike-corley 6/6/96 (2942)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 06:44:21 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072010404159@4ax.com>
Source record: 37092
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

From: richard@musicians-net.co.uk (Richard Fairhurst)
Newsgroups: uk.misc,uk.media,uk.legal,uk.politics.misc
Subject: A Mike Corley newsgroup?
Date: Thu Jun 6 05:02:17 1996

In article <2520@osiris.win-uk.net>, burridge@osiris.win-uk.net (Paul
Burridge) wrote:

> In article <833844951snz@eloka.demon.co.uk>, Owen Lewis
(oml@eloka.demon.co.uk) writes [re: Mike Corley]:
> >To be honest, having made the mistake of reading his magnum opus twice
> >(like many forms of discomfort, one is prone to repeat the experience to
> >confirm that it really is a bad as one thought), I read nothing he writes
> >but am tempted by some of the sub-threads that develop.
>
> I made the grave error of showing one of his masterpieces to my
> mother, together with some of the (less than respectful) responses
> to it. Regrettably, she is now addicted to the Corley saga, is
> very much an admirer of him (viewing him as a pugilistic underdog
> deserving of great admiration) and I have to waste reams of paper
> printing all this bilge out every other day, for her delecation.

Given that Mr Corley clearly holds a certain fascination for some people,
and that his website, although "informative", isn't exactly ideal for
encouraging discussion of the sort that we all enjoy so much (including
Mike himself, by the look of things), would anyone be up for a Mike
Corley newsgroup - uk.fan.mike-corley, alt.fan.mike-corley, whatever?
(Sorry, I'm not very well up on these things.)

This would be a perfect place for Mike to post his writings, and perhaps
the occasional "look at the ...mike-corley newsgroup" posting in uk.misc
and so on would be accepted in place of the current cross-posts.

--
Richard Fairhurst (assistant editor, Keyboard Review)
"I am the vine: and you are the branches"

2942

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------>>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

677. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 06:48:08 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9992AAE5D621Bnonenowhere@61.9.191.5>
Source record: 37088

Roy Lewallen <w7el@eznec.com> wrote in news:13cid39fvvdsk28
@corp.supernews.com:

...
> 1. Belden 9204, like a lot of other 75 ohm cables, has a copper-plated
> steel center conductor for strength. At 3.8 MHz, depending on the
copper
> thickness, current might be entering the steel. If it is, the loss will
> be a lot more than a simple model for solid copper would predict. I
> notice that the statement at the bottom of the data you posted says
> "Loss model source data frequency range 10.000 - 1000.000 MHz". You're
> well below that. A good reason for a lower limit on the model would be
> not accounting for current penetrating into the steel.

Roy, the reason I show the freq range on which the model is built is for exactly the case you are discussing. It makes it clearer when the model is an extrapolation, and confidence limits should be wider.

One of the things that I have done when doing the regressions on the source data is to discard low frequency points that have high error wrt the regression. This effect occurs almost intirely with CCS centre conductor type cables.

Not all RG59 and RG6 type cables have CCS, and the worry with low cost CCS is whether the coating is even thinner than the 9204.

I use RG6 quite a bit for ham work, and the cable I buy uses a HDC centre conductor. I would avoid CCS for lower HF.

Back to the original problem, it would take a huge loss to deliver an input impedance of just under 75 ohms from a 54 ohm load and a quarter wave of nominal 75 ohm line. The Zo looks low.

Owen

PS: The quoted output from TLLC is somewhat hard to read due to the Greek characters and some other symbols not copying to plain text.

678. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 06:58:05 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <keqdnSW-l_TMoVTbnZ2dnUVZ_u6rnZ2d@giganews.com>
Source record: 37089

Roy Lewallen wrote:
> Sorry I don't have the time to dig into this more deeply right now. I'm
> sure Owen has done a great job in estimating loss, but here are some
> things to think about:
>
> 1. Belden 9204, like a lot of other 75 ohm cables, has a copper-plated
> steel center conductor for strength. At 3.8 MHz, depending on the copper
> thickness, current might be entering the steel. If it is, the loss will
> be a lot more than a simple model for solid copper would predict. I
> notice that the statement at the bottom of the data you posted says
> "Loss model source data frequency range 10.000 - 1000.000 MHz". You're
> well below that. A good reason for a lower limit on the model would be
> not accounting for current penetrating into the steel.
>
> 2. Some common RG-59 type cables have stranded center conductors and tin
> plating. Both increase the loss. More importantly, stranding results in
> much thinner copper for a given percentage of wire diameter of copper
> cladding.

> 3. A logical way for a cable manufacturer to cut costs is to put a
> thinner copper cladding on the center conductor. This would have no
> effect on the performance at VHF and above, where the cable is most
> likely to be used. So thin copper wouldn't surprise me.
>
> The only way to really know the loss is to measure it. And this might
> not be the reason for any apparent error. But it might be. As Tom said,
> though, 10, or even 15% deviation from nominal isn't unusual.
>
> Let me relate a story. Years ago, I came across a very large surplus
> quantity of approximately 0.1" diameter 75 ohm cable. It was just before
> Field Day, and because it looked to be in good physical condition, I
> measured off 100 feet, put a couple of BNC connectors on it, and tossed
> it into the pack as feedline for the 40 meter antenna. (I backpack my
> gear on Field Day, so weight is a major consideration.) Field Day went
> ok, but it was one of those years when we were just at the other
> stations' noise level, requiring a lot of repeats, QRZs, etc. Afterward,
> my FD partner was saying that all we needed was another 2 or 3 dB gain
> on 40, and we'd do a lot better. I agreed. Not too long afterward, I was
> measuring the impedance of a folded dipole through a half or full wave
> of that 75 ohm coax (since I had a lot of it), and was getting bizarre
> results. And that's when I first learned of the importance of cable loss
> on impedance transformation. I had been assuming lossless cable for my
> calculations of load Z given input Z, but got suspicious that loss might

> play a role. When I modified by equations to account for loss, I was
> surprised at how much difference even a little loss made. (As it turns
> out, loss makes more difference when the load Z is far from the cable
> Z0, as it was in this case, than when they're about the same.) I put
> more and more loss into the formula until I got about what I expected
> for load Z, given the input Z I was measuring. 4 dB at 7 MHz! A quick
> measurement with the wattmeter confirmed that the cable did indeed have
> that much loss. The problem was the thinness of the copper cladding on
> the very small steel center conductor strands. Even though the cladding
> was a substantial portion of the wire diameter, it was still very thin
> because of the tiny wire diameter. At our next sked, I told my FD
> partner that I'd figured out a way to get a couple more dB out of our 40
> meter antenna. . .
>
> Roy Lewallen, W7EL

Interesting topic! I've never encountered an RG59 that had a stranded
center conductor but I'll take your word for it. I *have* seen an 80 ohm
RG59, though (Belden 8221).
Bryan WA7PRC

679. MI5 Persecution: Old_500 5/7/96 (4165)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 07:07:26 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072011034665@4ax.com>
Source record: 37093
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

From: box6565@embankment.com (Old_500)
Newsgroups: uk.misc
Subject: Dear Mike Corley
Followup-To: uk.legal,uk.misc
Date: Fri, 05 Jul 1996 15:41:16 GMT
Organization: XYz
Lines: 55
Message-ID: <31dd3788.8481134@news.dircon.co.uk>
NNTP-Posting-Host: gw1-073.pool.dircon.co.uk
X-Newsreader: Forte Agent .99e/16.227

==========

Subject: Now we tell the truth as it really is
Newsgroups: uk.misc
Organization: Toronto Free-Net
Summary:
Keywords:

:AND a second posting which appeared in uk.legal on 5th July 1996 (isn't Mr
:Corley popular ?)

> Dear Mike,

> I've just spoken to a man who knows and he has told me you
> have never ever been a target.

> My man knows because he once wrote a report on you after
> you made complaints.

Come off it "Big Ears", if you're going to pretend someone else is giving me
advice then at least get one of your fellow coppers to write it so that it
isn't obviously written in the same style as your posts.

Also both your post and the one you're pretending isn't yours were posted from
pipex via news.dircon.co.uk, viz:

YOURS;

From: BigEars@technocom.com (Big Ears.)
Message-ID: <31ddacfe.7445797@news.dircon.co.uk>
NNTP-Posting-Host: gw5-072.pool.dircon.co.uk

"NOT YOURS";

From: box6565@embankment.com (Old_500)
Message-ID: <31dd3788.8481134@news.dircon.co.uk>

NNTP-Posting-Host: gw1-073.pool.dircon.co.uk

:NCIS leaks and most policemen regard it as unaccountable and occasionally
:insecure. M Howard promises to make NCIS publicly accountable.

You know a lot about what policemen think, don't you?

4165

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

680. MI5 Persecution: Silly-billy 6/7/96 (5388)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 07:34:01 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072011301978@4ax.com>
Source record: 37094
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

From: Mike_Corley_Fan_Club@Nut_house.org (Old_500)
Newsgroups: uk.misc,uk.legal,uk.media,alt.radio.uk,rec.arts.tv.uk.misc
Subject: MC Exposed as a Fraud
Date: Sat, 06 Jul 1996 17:01:05 GMT
Organization: Anti-Nuts Inc.
Lines: 33
Message-ID: <31de9b91.11926469@news.dircon.co.uk>
References: <Du4LqI.32o.0.bloor@torfree.net>
NNTP-Posting-Host: gw5-055.pool.dircon.co.uk
X-Newsreader: Forte Agent .99e/16.227

Sad, confused and emotional disturbed Mike Corley wrote:

{ snip }

Because he has made himself into a martyr and now he finds it impossible to back down. Mike's big secret has now been exposed. He made everything up.

Every time Mike makes allegations against the police, MI5, Tom-Dick-and-Harry etc. those organisations have taken people off vitally important work to ascertain whether or not there was any substance in Mike's ranting allegations.

When I'm told by someone who really does know such things that there was never any plot to get Mike then I trust that person sufficiently enough to accept his word.

The problem is Mike has escalated matters to an extreme level and like many silly billys he will find it impossible to give up all his self created crap and to live a normal life. After all what can Mike do now this crap has been exposed as untrue ? What new cause can Mike dedicate himself to ? (Some might read that as: who else can Mike now start upsetting ?)

So Mike write to John Major, c/o the Private Secretary, 10 Downing Street, London SW1A 2AA and ask the Prime Minister to help you. I'd normally disclose his fax numbers but if I did that you might jam up the lines with abusive postings just like you do here on Usenet.

Is anyone interested in joining with me to do a mass e-mailing of protests to Anon Penet and to Toronto Free Net in an attempt to flood their computer systems thus forcing them to seriously consider pulling the plug on Mike ? I'm not sure but is my proposal called a "flame" ?

==========

From: BigEars@technocom.com (Big Ears.)
Newsgroups: uk.misc,uk.legal,uk.media,alt.radio.uk,rec.arts.tv.uk.misc
Subject: Re: MC Exposed as a Fraud
Date: Sat Jul 6 17:34:46 1996

John Youles commented:

> I've found that torfree.net don't respond, perhaps if they got a high
> enough number of complaints they might take notice. See their web pages
> for email addresses.

Perhaps we should give Mike 7 days from today (6 July 96) to come to his senses and they start a massive multiple E-mailing campaign to Toronto Free Net. If all us victims send multiple copies of E-mails to the right addresses in Toronto then perhaps the Canadians will begin to get the appropriate message.

Copy e-mailed to Mike, just so he knows what is coming if he persists.

Big Ears. Posted to uk.misc
==========
Please think of the people sleeping in shop doorways every night
==========

Subject: I'm wasting MI5's time! I should be arrested!
Newsgroups: uk.misc,uk.legal,rec.arts.tv.uk.misc,alt.journalism,alt.journalism.print,$
Organization: Toronto Free-Net
Summary:
Keywords:

It's such a pity that the Security Service has no powers of arrest. How are they supposed to implement a proper secret police state without the ability to snatch Joe Citizen off the street whenever they feel like it?

"Old_500" aka "Big Ears" aka "PC Plod" wrote:
>Every time Mike makes allegations against the police, MI5,
>Tom-Dick-and-Harry etc. those organisations have taken people off vitally
>important work to ascertain whether or not there was any substance in Mike's
>ranting allegations.

I see. So they're not wasting six years of manpower to persecute you. They're wasting six years of manpower to prove I'm _not_ being persecuted.

I wish I was clever enough to think of something like that. I really, really do.

>When I'm told by someone who really does know such things that there was
>never any plot to get Mike then I trust that person sufficiently enough to
>accept his word.

Come on "Big Ears", why don't you admit that you made this posting? This is exactly the same line you were feeding me a few months ago. The posts are from the same news server, it's even the same newsreading software (Forte Agent .99e/16.227).

I'm afraid that if you friend "in the know" denied the existence of a plot then he was being, as they say, economical with the truth. Judging by the extreme reaction in London in May, and the panic you're showing now, as well as the replay post yesterday, I would say that things are hotting up again. But for you this time, not for me. I am out of harm's way, and there is very little you can do as long as I stay out of the UK.

5388

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

681. Re: Practical HF Digital Voice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 11:21:03 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <v1aop4-m65.ln1@p400bob.personal.cox.net>
Source record: 37095

Funny you should mention that Ed.

One of my long term projects is a "where is the family car" system that I had hoped to use a very narrow band/slow data link for GPS data as well as short text message exchange. Thinking along the lines of super slow QRSS/PSK31 setup on 13.56MHz. The narrow bandwidth and low power would I hope cover much of the country but I'll admit I haven't done the maths on it.

I have seen a PSK63 system that does HF mail type exchanges. Kind of slow but very do-able. Just a HF rig and laptop/PC at both locations and you can stay in touch! When the sigs are real good of course you can use plain old SSB!

Cheers Bob W5/VK2YQA

Ed Cregger wrote:
> I just ordered a digital squawk box made by AOR. I'm interested in
> staying in contact with my wife's mobile when she is "on the road"
> hawking the business' wares at quilt fests and the like.

682. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 13:02:28 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <75-dnf0Zl-BFDVTbnZ2dnUVZ_tKinZ2d@comcast.com>
Source record: 37096

<mcclements@gmail.com> wrote in message
news:1187588734.476663.103350@w3g2000hsg.googlegroups.com...
> Well ***Opps****. I took out my contacts already. And I read the cable
> Zo as the impedance at the input end. As you can see it says 102.11-
> j3.74. I am still going to search out some new RG-59/U...
>
> -Scott, WU2X
>
If you are going to buy new coax, might as well get something decent. I used
RG11 FOAM for a 1/4 wave transformer at 3.8 MHz, and it worked per theory.

Tam/WB2TT

683. MI5 Persecution: Silly-billy 6/7/96 (496)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 13:27:13 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072013271052@4ax.com>
Source record: 37097
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

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Newsgroups: uk.misc,uk.legal,uk.media,alt.radio.uk,rec.arts.tv.uk.misc
Subject: MC Exposed as a Fraud
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Subject: Re: MC Exposed as a Fraud
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Big Ears. Posted to uk.misc
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Please think of the people sleeping in shop doorways every night
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I'm afraid that if you friend "in the know" denied the existence of a plot then he was being, as they say, economical with the truth. Judging by the extreme reaction in London in May, and the panic you're showing now, as well as the replay post yesterday, I would say that things are hotting up again. But for you this time, not for me. I am out of harm's way, and there is very little you can do as long as I stay out of the UK.

496

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

684. where do I look for this info???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 13:33:08 UTC
From: lorentsonci@lycos.com
Message-ID: <46c996dc.1018076@news.devtex.net>
Source record: 37099

I hope u can help. I live out in the boonies, and have 'dial
up', about 5 miles from my qth is a I-35 rest area with 'wireless'.
I have been told, the 'wireless' extends two or three miles in both
directions. Where do I post a question about trying to excess this
wireless service???? thanks in advance. cl73

685. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 13:33:56 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fac58c$15qo$1@f04n12.cac.psu.edu>
Source record: 37098

John Smith I wrote:
>
> Digital is not analog, when adverse conditions have made an analog
> signal totally unusable, a digital signal, most likely, may still be
> achieving 100% error free data transfer--it is just the nature of the
> beast.

Hi John,

The error here is that that digital signal in a bpl setting is trying to function in an analog world. And for all practical purposes, while it is on the line and till it hits the modem, it is just another RF signal. Disregard the 1 and 0 aspect, and think about the rapid stream of pulses. Each one on it's own is just a "state of 1 or 0, but taken together, they are pulses that occur at RF frequencies in toto.

So here you have a string of pulses that are running at say 10 MHz. If no other signal gets into that line, all is well. But that same line, which can inadvertently radiate outward, can pick up another signal on the same frequency - and it is very likely that whatever frequency you might be transmitting on will affect it, since the pulsed frequency equivalent (sorry for the goofy term, I'm not sure what else to call it) varies by quite a bit, thereby making it vulnerable to lots of different frequencies being transmitted.

Then if say the local school bus company is transmitting on some frequency near the BPL line, that power line might pick up some of that transmission, and send it down the line into someone's modem. That modem won't be able to make any sense of the messed up packets it is receiving. It'll call for a resend, and receive more gibberish.

> The "intelligence" of the software controlling the data transmission(s)
> is the single most important factor--as logic would dictate. Even under
> almost total saturation (it would be virtually impossible for 100%
> saturation, baring hooking the kw+ rig directly to the power lines) of
> the BPL signal some type of heterodyne would be occurring with the KW
> signal.

A packet is a surprisingly delicate thing. It takes nowhere near hypothetical 100 percent saturation with an RF signal to change one bit, which can disrupt a packet.

> Digital is magnitudes more robust than analog, again owing to the very
> nature of the beast and the simplicity of the on/off, pulse width,
> timing nature of the signal.

John I might respectfully suggest that you do a little studying on the nature of digital signals. I've been dealing with them since the late 70's, and they aren't anywhere near as robust as you believe.

- 73 de Mike KB3EIA -

686. MI5 Persecution: BBC+ITN=MI5 23/7/96 (1719)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 13:50:12 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072013500969@4ax.com>
Source record: 37100
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Newsgroups: uk.misc,alt.radio.uk,uk.media,alt.politics.british,uk.legal
From: bu765@torfree.net (Mike Corley)
Subject: MI5 Buy into the Media
Message-ID: <Dv0p34.73.0.bloor@torfree.net>
Organization: Toronto Free-Net
X-Newsreader: TIN [version 1.2 PL2]
References: <Pine.OSF.3.91.960716155603.6898A-100000@ermine.ox.ac.uk>
Date: Tue, 23 Jul 1996 22:28:15 GMT

Peter Harding (harding@ermine.ox.ac.uk) wrote:
: I was at speakers' corner on Sunday. There was one chap who was bellowing
: about something or other, I don't know what, but one thing he said to
: someone caught my ear:

: "BBC, MI5, same thing."

Can't disagree with that sentiment.

Wasn't it documented that MI5 sometimes "bought" journalists and broadcasters?
I remember reading a report by some jouralist who had been offered an extra
tax-free income by MI5 to become their covert mouthpiece, and had refused.

Bet you lots of others didn't refuse. Why do you think MI5 have such easy
access to the BBC and media? Because they're directly paying them off, that's why.

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Tue, 23 Jul 1996 20:01:15 uk.misc Thread 20 of 25
Lines 17 Re: MI5 Buy into the Media No responses
Iain@cummings.demon.co.uk Iain Cummings at Fish!

In article <Dv0p34.73.0.bloor@torfree.net>, Mike Corley
<bu765@torfree.net> writes
>
>Wasn't it documented that MI5 sometimes "bought" journalists and broadcasters?
>I remember reading a report by some jouralist who had been offered an extra
>tax-free income by MI5 to become their covert mouthpiece, and had refused.
>
>
It was Jon Snow of Channel 4.
--
Iain C*mmings - iain@cummings.demon.co.uk
VISIT THE FEARFUL WORLD OF JIMMY McNULTY - VIOLENT NUTTER!
This web-site is not suitable for mature prudes.
http://www.geocities.com/SunsetStrip/7433/

==========

> : >mouthpiece, and had refused.
> :
> : It was Jon Snow of Channel 4.
>
> Was it reported in any of the papers?

It has been reported several times. The most recent was in Private Eye,
a few months back. As I recall they also wanted information from him;
journalists would be a natural choice for members of the Security Service
and the Secret Intelligence Service for information sources.

> It might be interesting to see what he had to say regarding their
> attempt to recruit him.

He was most concerned that many others would have accepted such an
offer. However, we can probably make an educated guess as to some of
those who accepted: Nigel West (Rupert Allason, MP) and Chapman Pincher
would come near to the top of the list.

--
\/ David Boothroyd. Socialist and election analyst. Omne ignotum pro magnifico.
British Elections and Politics at http://www.qmw.ac.uk/~laws/election/home.html
I wish I was in North Dakota. Next General Election must be before 22nd May '97
The House of Commons now : C 324, Lab 272, L Dem 25, UU 9, PC 4, SDLP 4, SNP 4,
UDUP 3, Ind 1, Ind UU 1, Spkrs 4. Government majority = 1. Telephone Tate 6125.

1719

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
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687. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 13:52:02 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fac6a2$1elm$1@f04n12.cac.psu.edu>
Source record: 37101

Owen Duffy wrote:
> gsm@mendelson.com (Geoffrey S. Mendelson) wrote in
> news:slrnfchb50.qsv.gsm@cable.mendelson.com:
>
> ...
>> At worst some neighbor would get pissed off that you are messing up
>> their Internet and start a FUD campaign to force you off the air for
>> "dangerous radiation".
>
> Interesting that you mention that.
>
> Some of our good friends in Tasmania started a FUD campaign to scare
> ordinary electricity consumers about the electromagnetic raidation hazard
> of electric blankets when they were BPL 'enhanced'.

Good grief. The answer is to power them with DC, and tell 'em that it will serve as a magnet, thereby allowing magnetism's great healing properties. Could sell little boxes with diodes in them. Maybe a crystal or two for harmonic hegemony and celestial peace too.... ;^)

> There is some steady, sound engineering / scientific work going on to
> discover and reveal the impact of BPL, it is small in scale but IMHO
> credible and ongoing. Uninformed and redneck comment from the amateur
> community makes the job just that much harder.

I find much of the commentary very uninformed. Much of this has to do with the Digital folks not understanding the RF folks, and vice versa. Especially alarming is the digital folks not understanding that a high speed digital signal is for all intents and purposes an RF signal. It isn't 1's and 0's any more, it is an RF signal until it gets into the computer.

Of course, the RF savants have a hard time understanding things like "Whaatya mean Vista dropped my IP address, and the only cure is to reboot. It's been working for three days now - it just couldn't suddenly quit. Electronics doesn't work like that!"

At that point, I offer them the choice of being right, or getting things working.

- 73 de Mike KB3EIA -

688. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 13:55:19 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fac6g7$1elm$2@f04n12.cac.psu.edu>
Source record: 37102

John Smith I wrote:
> Michael Coslo wrote:
>
> > ...
>> I read the original work too, and came to much the same
>> conclusion. I'd put more stock in zero point energy than this little
>> experiment allowing us to get somewhere before we start.
>>
>> The telegraph's article is a lot more satisfying though, if
>> incorrect.
>>
>>
>> - 73 de Mike KB3EIA -
>
> And just what is your Ph.D. in? I just want to know so when I quote
> they know I am just not quoting some guy with an opinion ...

Donchya know, I graduated in the same field you did.

- 73 de Mike KB3EIA -

689. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 14:09:00 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fac79s$15s6$1@f04n12.cac.psu.edu>
Source record: 37103

Cecil Moore wrote:
> John Smith I wrote:
>> It is obivious they are nit-picking in an endeavor to make you appear
>> as an idiot;
>
> People who say, "Everything is already known
> about __________" have removed any doubt about
> who is the idiot. :-)

Sure enough, Cecil. I do think that continual suspension of disbelief is in the same boat however.

It is a slippery slope some practice between healthy skepticism, and trying to force rational people to keep their mouths shut about any new theory no matter how crackpot it is.

When taken to its extreme, the practitioner ends up believing every alternative theory, and is skeptical toward all established ones.

- 73 de Mike KB3EIA -

690. Re: Practical HF Digital Voice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 14:14:57 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fac7l1$15s6$2@f04n12.cac.psu.edu>
Source record: 37104

Bob Bob wrote:
> Isn't half the fun of HF using ones brain as an organic processor to
> pull words out of noisy signals? <grin>
>
> Seriously I always wondered why something like PSKnn became so popular
> when with a bit more code writing on your average PC might have yielded
> a viable digital voice circuit. Maybe your average ham doesn't want to
> say much, only caring to exchange RST's for a card! This is actually
> what deters me from PSK31, most seem to only want a limited contact..

Wow, my experience has been different. Aside from the obvious short DX
contact, I've spent a lot of time with pretty verbose people on psk31.

I recall one 3+ hour contact on 80 meters. Were my fingers tired!

- 73 de Mike KB3EIA -

691. MI5 Persecution: Latest technology 31/7/96 (2942)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 14:16:53 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072014165060@4ax.com>
Source record: 37105
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

From: Jon <Jon@jongru.demon.co.uk>
Newsgroups: uk.misc,uk.legal,uk.politics.misc,alt.politics.british,uk.media
Subject: Surveillance
Date: Wed, 31 Jul 1996 23:20:19 +0100
Organization: -
Lines: 29
Distribution: world
Message-ID: <wIznBGAjw9$xEwTw@jongru.demon.co.uk>
References: <105319Z26071996@anon.penet.fi> <4tfo1f$rvc@morgana.netcom.net.uk>
NNTP-Posting-Host: jongru.demon.co.uk
X-NNTP-Posting-Host: jongru.demon.co.uk
MIME-Version: 1.0
X-Newsreader: Turnpike Version 1.12 <nQyLm4IxRmtU60uHtPa$08ppe9>

In article <4tfo1f$rvc@morgana.netcom.net.uk>, "B.Jury" <bj2@ukc.ac.uk>
writes
>an410901@anon.penet.fi wrote:
>> ... Normal surveillance
>>"mini-cameras" are quite noticeable and require visible supporting
>>circuitry. It seems to me the best place to put a small video surveillance
>>device would be additional to a piece of electronic equipment such as a TV
>>or video.
>
>I would imagine it is quite easy to compleatly hida a camera, even in
>a familar enviroment, such as a persons home. You only need a hole the
>size of a pin hole, for the camera to see through.

This is true. I frequently employ private detectives to spy on people
(there's a good reason for this and I'll tell you if you guess
correctly) and one such detective showed me the latest technology only
last week. A small rucksack. One strap of the rucksack has a tiny hole
in it that you wouldn't notice unless someone pointed to it. That's the
camera: the wires lead into the rucksack itself where there is a video
tape recorder little bigger than a Walkman. I don't know if that's what
Roger Cook uses but it certainly explains why it is that the subject can
look straight into the lens and not realise (s)he's being filmed. Now, I
say "latest technology" and I think that's the technology that the
police use as well as the retired police who become private detectives,
but no doubt the security services have far more sophisticated
equipment.

--
Jon

2942

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692. Re: Practical HF Digital Voice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 14:18:28 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fac7rk$15s6$3@f04n12.cac.psu.edu>
Source record: 37106

Bob Bob wrote:
> Funny you should mention that Ed.
>
> One of my long term projects is a "where is the family car" system that
> I had hoped to use a very narrow band/slow data link for GPS data as
> well as short text message exchange. Thinking along the lines of super
> slow QRSS/PSK31 setup on 13.56MHz. The narrow bandwidth and low power
> would I hope cover much of the country but I'll admit I haven't done the
> maths on it.
>
> I have seen a PSK63 system that does HF mail type exchanges. Kind of
> slow but very do-able. Just a HF rig and laptop/PC at both locations and
> you can stay in touch! When the sigs are real good of course you can use
> plain old SSB!
>
> Cheers Bob W5/VK2YQA

A person should be able to come up with a multiple PSK31 signal method
of sending hfemail. Maybe even PSK63. I wouldn't want to send much
faster than that for BW/SNR reasons.

693. MI5 Persecution: Just too crazy 30/9/96 (4165)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 14:45:10 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072014450591@4ax.com>
Source record: 37107
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Subject: Re: Is MI5 persecuting Mike Corley?
Newsgroups: uk.politics.misc,uk.net,uk.misc,uk.legal
Followup-To: uk.politics.misc,uk.net,uk.misc,uk.legal
References: <NEWTNews.843523097.30215.apascoe@apascoe.patrol.i-way.co.uk> <DyADyG.8IK$
Organization: Toronto Free-Net
Distribution:

wooding@cf.ac.uk wrote:
: In article <NEWTNews.843523097.30215.apascoe@apascoe.patrol.i-way.co.uk> apascoe@pa$
: > In summary, for there to be a serious possibility that Mike
: >Corley's allegations are true, there needs to be evidence of two
: >things. Firstly, there must be evidence of subversive activity on
: >his part. Secondly, there needs to be evidence of MI5 taking
: >measures to counter this subversive activity, in proportion to the
: >magnitude of the threat posed. Upon reading Mike Corley's posts,

: Alan,

: What about the following scenario? MI5 conducts "experiments" including
: field trials of novel surveillance methods. Say there was a "research
: project" underway to see just how invasive a surveillance of an
: individual could be. Perhaps it wasn't research, perhaps it was for
: training of novice personnel. Either way, there is a sizeable risk of
: detection. In order to minimise the consequences of this, you choose
: someone who is out of the public eye, and if possible someone whose
: credibility is already damaged - by diagnosis of schizophrenia, for example.
: This will facilitate the "plausible denial" if something goes wrong.

: I think this would be closer to Mike's theory.

: Mike, if you are reading, please don't post the story again. Anyone can
: read it at [snip] if they are interested. Also, don't
: think that I actually *believe* the above. On cost alone, it is extremely
: unlikely to be true, and some elements of the story (people in the media
: being "in on it") are just too crazy (though I can see how the paranoia
: builds to the extent that you can see "them" everywhere).

My argument is that the fact that it's so totally crazy is what makes it so
plausible and so hard to prove.

I shall continue to try to find ways to kick down the house of cards. Because
it is a brittle structure. It only needs one person to corroborate, and then
it's all over.

: P.S. Anyone else ever thought of "what-ifs" along the same lines? I
: remember as a boy daydreaming that maybe I was the focus of national

: attention in a "let's follow the life of one person from life to
: death" study - that while I was out or in bed there were programmes on
: the television about my life so far, etc. It makes for a good fiction,

Perhaps MI5 have become victims of their own paranoia. Their agency has been thought of as acting disreputably, so when their decision arrives, they don't think twice about breaking the law. Whereas say CSIS (the Canadian equivalent) is at pains to point out how it would never ever do anything in contravention of the law, and how it is strictly controlled in what it does and how it does it.

If this matter does ever make it into the public gaze, then it won't just be a few individuals in the media or security service who'll get hit. The UK is supposed to be a civilized democratic country (East Germany called themselves a democracy and they had the Stasi, but anyway). In a civilized country these things shouldn't be happening - and it is ultimately Parliament and the government who are answerable for not imposing sufficient restraints and accountability on those who are supposed to be ensuring security for citizens, not jeopardising it.
.....

4165

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694. MI5 Persecution: Usual targets of such abuse 10/10/96 (5388)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 15:10:29 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072015102573@4ax.com>
Source record: 37108
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Subject: Re: MI5 says "Kill Yourself"
Newsgroups: uk.misc,uk.legal,uk.politics.misc,uk.media
References: <zlsiida.4248.3258FE24@fs1.mcc.ac.uk> <53eeev$cmg@axalotl.demon.co.uk> <5$
Organization: Toronto Free-Net
Distribution:

iain@hotch.demon.co.uk (Iain L M Hotchkies) wrote:
>Indeed. If you've ever had a 'conversation' with someone suffering
>from florid schizophrenia, you'll know how difficult it can be to
>'argue' with them.

I don't have florid symptoms. But I'm in a difficult situation, because those people who don't know, aren't going to believe, and those who do, they just go along with the crowd. It's never a good idea to go against the grain, and the grain here is defined by interests in the establishment and the media. Even people who could say out loud what was happening won't, because then there's a risk that they'll be seen as traitors and ostracised.

Usually this type of 'hidden abuse' is racial and targetted at a racial minority within a country. You keep the minorities out of the good jobs, but you don't admit discrimination exists. It happens everywhere, not just in Britain. The persecution that is going on now is in reality a refined form of racism. Instead of "nigger" it's "nutter", and abusing the mentally ill is still socially acceptable today. In 50 years it might not be, but today there isn't any social or legal sanction against it.

So really they've refined racial harassment down to a minority of one. The words may be different, but the methods are the same.

5388

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
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695. MI5 Persecution: Excellent web page 19/10/96 (6611)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 15:31:07 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072015310444@4ax.com>
Source record: 37109
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

From: Chris Lawton <chrisla@ti.com>
Subject: Re: MI5 persecution ;; Cost of the Harassment
Message-ID: <325A3DA6.3447@ti.com>
Date: Tue, 8 Oct 1996 11:40:22 GMT
Reply-To: chrisla@ti.com

DANIEL ROBERT HOLDSWORTH wrote:
>
> In article <3262b4fc.14638885@192.168.2.1>,
> stevea@castlsys.demon.co.uk.no.spam.thanx (Steve A) writes:
> :On 4 Oct 1996 13:19:16 +0100, drh92@aber.ac.uk (DANIEL ROBERT
> :HOLDSWORTH) wrote:
> :
> :>
> :> Oh NO!
> :>
> :> Not here too.
> :>
> :> This MI5 persecution thread's been doing the rounds of UK.MISC for ages;
> :> it concerns some paranoid loony who thinks that MI5 are out to get him.
> :>
> :> They're not; everyone else on that newsgroup IS.
> :>
> :> Killfile the moron NOW!
> :

Bit sad really, the guy (must be the same one) has an excellent web
page. Definite waste of talent.
PS: I am NOT disclosing his URL.

> The man's been changing his anon remailer address periodically, too.
>
> Why on earth he does I don't know; he's in serious danger of creating some
> real enemies, apart from the phantoms his sadly deranged mind has created.
>
.....
From: nuala@mimir.com (Nuala Fahey)
Subject: Re: MI5 persecution // BBC TV and Radio
Date: 4 Oct 1996 16:03:24 +0100
Message-ID: <5338vs$hrc@freyja.mimir.com>

Simon Lord <simonl@hrmconsult.co.uk> wrote:

>I expect he will soon be seen in uk.out.to.lunch

Considering he spammed it far and wide (well, at least to alt.angst and
alt.folklore.urban which I saw and each of those included other groups
in the Newsgroups line) I doubt he'll be seen anywhere for long. Using
the xs4all remailer doesn't really help if you post the url to a
web site which makes it clear who you are.

Nuala, who thinks that the sad thing is he used frames much better
than many sites done by supposedly 'sane' people.
--
Out of the ash I rise/With my red hair/And I eat men like air - Plath
You were everything to me/For twenty minutes/
Now I'd rather you would leave - Baby Chaos
.....
Date: Sat, 19 Oct 1996 01:36:26 +0100
From: mike.monty@zetnet.co.uk
To: bu765@torfree.net
Subject: Praise

Hi,
Totally excellent page. Although I am a little confused whi is being
percecuted?

Cheers Michael

mike.monty@zetnet.co.uk
.....

6611

--
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696. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 15:51:52 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnfcje4o.1kmm.bit-bucket@shell.config.com>
Source record: 37110

On Sun, 19 Aug 2007 16:28:32 -0000, mcclements@gmail.com wrote:
> Hello,
>
> I bought some no name RG-59/U coax (RG-59/U-SP-95 Made in the USA). I
> went to cut and tune a 1/4WL matching section for 3.8Mhz. I cut the
> coax a little longer because I intended to tune it with my MFJ259B
> or.LP100 exactly to the design frequency. I have a 50 Ohm dummyload
> that actually is about 54 Ohms @ 3.8Mhz. Plugging the numbers into
> ON4UN's program for calculating impedance along a coax line: Given the
> coax is 75 Ohms and the load is 54 Ohms, the program reported that if
> the line was a 1/4WL long the impedance at the source end would be
> about 105+j0 Ohms.
>
> However my actual measurement with both the MFJ259B and LP100 showed
> an impedance of 74 + j0 Ohms.
>
> http://remote.wu2x.com:8888/lee/quarter-wave-xfrmer-75-meters.jpg
>
> I plugged in a few numbers into ON4UN program and calculated it would
> take coax that had a characteristic impedance of 64 Ohms to see the
> transformation that I am seeing.
>
> Is there any error in my logic here? If this coax really is 64 Ohms,
> then I'd like to find something that really is closer to 75 Ohms so I
> can achieve the 2:1 ratio that I intended.I still have another 100
> feet of it and can do more tests with the tools I have on hand.

After looking over some of the followups to your post, I had a thought.

Addressing the errors' introduced by loss, and the possibility that
you're seeing worst case loss at a lower frequency, why don't you go
back and re-measure your matching section at 3X, 5X, 7X 3.8 mcs.?

It's the reverse of a trick I've used to cut n*1/2WL 1:1 coax runs for
VHF -- by measuring at *sub* multiple freqs.

Anyway -- it's a thought.
Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
*** Killfiling google posts: <http://jonz.net/ng.htm>

697. MI5 Persecution: WTGROMT 18/11/96 (7834)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 15:52:07 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072015520400@4ax.com>
Source record: 37111
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Subject: Re: MIKE AND THE DOWNFALL OF UK.LEGAL
Newsgroups: uk.misc,uk.legal,uk.politics.misc,uk.media
Followup-To: uk.misc,uk.legal,uk.politics.misc,uk.media
References: <DytvBE.9J.0.bloor@torfree.net> <Dzt3oG.EE2.0.bloor@torfree.net> <54q3pd$$
Organization: Toronto Free-Net
Distribution: world

J.J.Smith@ftel.co.uk (John J Smith) wrote:
>Actually, I see uk.misc as a source of occasional interesting information,
>and I like jokes. Some people can laugh, you see.
>
>And as for you spams, exactly how much good have they done so far?

Not much. I thought they might, but the realization has arrived that this
particular avenue of exploration is at a dead end.

WTGROMT (well that's got rid of me then!)
.....
Subject: Re: MIKE AND THE DOWNFALL OF UK.LEGAL
From: wooding@cf.ac.uk ()
Date: 1996/11/04
Message-Id: <E0CFFH.1J9@cf.ac.uk>
X-Nntp-Posting-Host: thor.cf.ac.uk
Sender: news@cf.ac.uk (Usenet News user)
References: <DzuwML.F4o.0.bloor@torfree.net> <DzzBs1.n3v@ftel.co.uk>
<E05GoF.Ku.0.bloor@torfree.net>
Organization: University of Wales College at Cardiff
Newsgroups: uk.misc,uk.legal,uk.politics.misc,uk.media

In article <E05GoF.Ku.0.bloor@torfree.net> bu765@torfree.net (Mike Corley) writes:
>J.J.Smith@ftel.co.uk (John J Smith) wrote:
>>Actually, I see uk.misc as a source of occasional interesting information,
>>and I like jokes. Some people can laugh, you see.
>>
>>And as for you spams, exactly how much good have they done so far?
>
>Not much. I thought they might, but the realization has arrived that this
>particular avenue of exploration is at a dead end.

Oh please let this be true and not just another wind-up!

>WTGROMT (well that's got rid of me then!)

Mike, without the spamming I'm sure you are welcome to stay around, being
one of the colourful "characters" of uk.misc.

Have a custard cream.

Dave.
.....

7834

--
Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
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698. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 15:53:51 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <facdeg$d3q$1@news.albasani.net>
Source record: 37112

Dave Oldridge wrote:

> ...
> Lots of times. My CW error-correcting hardware is excellent, is always on,
> and conveniently located in my head.
>
> But you're missing my point. A modem is always an analog device. And if
> it's listening on a frequency with a loud signal on it, then it can be
> saturated by that signal. I've not seen many that could copy the
> heterodyne. Mostly they just stop giving any recovery at all.
>

There are very rugged modems. Most people just accept the modem which
was included with their computer. A cheap modem implemented, almost
totally, in software; these can exhibit poor performance.

You get what you pay for, and like I say, BPL is a developing
technology; or, in other words, problems must be found before they can
be fixed. Your KW+ signal will be a great aid, possibly, in that
direction ...

Having worked in the software/algorithm/data-compression aspects of
modems, I have experienced high levels of line noise on standard modems
which needed new techniques to solve ... Although I have seen many
instances where line noise is at such levels even speech is horrible,
and data xmission slows to a crawl, there are few instances where it
becomes absolute zero--baring the physical disconnection of the line.

If you are inducing interference of a noticeable level in a persons
home/business that is noticeable, it will be more than just noticeable
on the BPL modem!

Regards,
JS

699. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 15:55:09 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <facdgu$d3q$2@news.albasani.net>
Source record: 37113

Dave Oldridge wrote:
> John Smith I <assemblywizard@gmail.com> wrote in
> news:fa8p0n$d5s$1@news.albasani.net:
>
>> Dave Oldridge wrote:
>>> John Smith I <assemblywizard@gmail.com> wrote in news:fa4i2ajve1
>>> @news.albasani.net:
>>>
>>>> Dave Oldridge wrote:
>>>>
>>>> ...
>>>> You need a good book on digital error correction algorithms in
>>>> digital communications.
>>>>
>>>> Unless you have constructed a real rf jammer (white noise really),
>>>> BPL will eat up any legitimate amateur communications you can throw
>>>> at it ... however, rumors do prevail, like the one about the tin
>>>> foil hat.
>>> So how is it gonna eat up having its receiver saturated? I'm pretty
>>> familiar with digital comms and, with the exception of some pretty
>>> slow speed stuff designed for weak signal work, most of it is not
>>> very good unless you have a really solid signal-to-noise ratio. I'm
>>> just saying that if it's getting out to my antenna that loud, then my
>>> kilowatt is gonna have a fair chance at saturating the thing's
>>> receiver. And the more noise they make, the more I'm apt to have to
>>> use the kilowatt to shout over them.
>>>
>>> Of course in our current enforcement situation here, I'd probably
>>> simply be told to stand down and have to go to great legal lengths to
>>> appeal the ruling.
>>>
>> Digital is not analog, when adverse conditions have made an analog
>> signal totally unusable, a digital signal, most likely, may still be
>> achieving 100% error free data transfer--it is just the nature of the
>> beast.
>
> Actually, I've found that, except for very slow data rate stuff, digital
> signals require a BETTER signal-to-noise than analog to be readable. And
> there is no partial readability with most of the commercially-used
> digital modes. That is to say you either have error-free transmission or
> none whatever.
>
>> The "intelligence" of the software controlling the data
>> transmission(s) is the single most important factor--as logic would

>> dictate. Even under almost total saturation (it would be virtually
>> impossible for 100% saturation, baring hooking the kw+ rig directly to
>> the power lines) of the BPL signal some type of heterodyne would be
>> occurring with the KW signal. Since digital is simply detecting an
>> ON/OFF signal, in conjunction with spacing/length of these, an on/off
>> signal is still detectable in this heterodyne--given the software is
>> aware and capable of reading this signal and switching "modes" to do
>> so, no harm is done to the data ... and without doubt, new error
>> correction methods will also develop as BPL grows and
>> hf-rf-terrorist-hams challenge this system ... <LOL!>
>
> You cannot recover data with a modem whose input transistor is biased off
> by rectified RF. I know this. I've tried it.
>
>> Digital is magnitudes more robust than analog, again owing to the very
>> nature of the beast and the simplicity of the on/off, pulse width,
>> timing nature of the signal.
>
> The only real advantage digital has is its error-correction algorithms.
> Those can do very good work when they actually have enough data to work
> with. But once the data recovery by the the very ANALOG device that is
> receiving the signals drops below their threshold, then the recovery
> becomes terrible. Some modems are better than others. My old Telebit
> 19.2K could suck 1200 baud recovery out of a phone line you couldn't talk
> on. But give it a couple of volts of RF in the mix and it would drop
> stone cold dead. And BPL has the "disadvantage" of not being able to
> filter our frequencies AND use them at the same time. At worst, I'd
> drive the BPL machinery to other parts of the band from where I was
> working....
>
>

Obviously, we have NOT seen the same equip/software/algorithms and
successes ... dream on ...

Regards,
JS

700. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 16:03:30 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <face0i$d3q$3@news.albasani.net>
Source record: 37114

Michael Coslo wrote:

> ...
> John I might respectfully suggest that you do a little studying on
> the nature of digital signals. I've been dealing with them since the
> late 70's, and they aren't anywhere near as robust as you believe.
>
> - 73 de Mike KB3EIA -

It is as if you have looked at one form of plant life and declared all plant life the same.

How you choose to implement digital, timing with pulses, pulse durations, etc., or any combination--takes digital into the world of variety. Although it can be difficult to get the machine code out of a modems hardware and study it (really impossible for the avg computer user), astute hacker/programmers do it all the time.

You are stuck in the "already all is known world" and see every new and interesting problem as halting to that technology in question. Mans history reveals such thinking to be the lie it is.

We deal in computers, we deal in a world where nothing is impossible--some things just ain't been done yet ...

Regards,
JS

701. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 16:06:19 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <face5r$d3q$4@news.albasani.net>
Source record: 37115

Michael Coslo wrote:

> ...
> Donchya know, I graduated in the same field you did.
>
>
> - 73 de Mike KB3EIA -

If such were true, it would be detectable in the working of your mind,
through your text--all I see is a little man who considers everything
bad and impossible ... in my world, such people are rare.

Regards,
JS

702. MI5 Persecution: No Justice 20/11/96 (9057)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 16:10:24 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072016102147@4ax.com>
Source record: 37116
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

(sent 20/11/96)
Subject: No Justice for those with mental illness
Newsgroups: uk.misc,uk.legal
Organization: Toronto Free-Net
Summary:
Keywords:

Well, the "legal option" has just foundered on the rock of lawyers refusing to deal with me on the grounds that my perception of harassment must be due to the disease.

So we're back to square one again, the same place we were two years ago.

Now perhaps one of our uk.legal participants can clarify this point. To me it seems illogical that lawyers should have the final say on whether you are allowed to proceed with a civil case or not. Is there a default mechanism or agency for cases such as mine where it is difficult to find a solicitor to represent you? What exactly is the "official Solicitor"? What is it possible to do if you can't find a lawyer to represent you?

A chance to get a useful response out of the uk newsgroups! perhaps they can be good for something else besides spamming.
.....

Represent yourself....like the defendants in the McLibel trial.
you will need to read some law..but you CAN legally represent yourself I believe.
Mike W.
.....
From: burridge@osiris.win-uk.net (Paul Burridge)

Yes, a lot of people do this nowadays. Saves on legal fees too. Lots of reading up required first, though.

-- Paul
.....
(posted 30/11/96 from bu765)

Subject: Re: No Justice for those with mental illness
Newsgroups: uk.misc,uk.legal
Followup-To: uk.misc,uk.legal
References: <E173G8.1oy.0.bloor@torfree.net> <5711vp$tfu@newton.cc.rl.ac.uk> <3311@os$
Organization: Toronto Free-Net
Distribution:

burridge@osiris.win-uk.net (Paul Burridge) wrote:
>>Represent yourself....like the defendants in the McLibel trial.
>>you will need to read some law..but you CAN legally represent yourself I
>>believe.
>>Mike W.
>
>Yes, a lot of people do this nowadays. Saves on legal fees too. Lots
>of reading up required first, though.

What can I do to get competent legal help though? If the case is on the face of it so bizarre that no solicitor would represent me or talk to me, then surely there must be a default mechanism? What is the "official Solicitor" that's been mentioned?
.....

All you need do is go to a good library & read up about it - that's what the McLibel 2 did.

--
Ban Everything or Ban Nothing !
http://www.mahayana.demon.co.uk/ ISO 1386-C compliant .sig
All words written in the above posting are my opinions
.....

9057

--
Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------>>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

703. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 16:15:50 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <facenm$d3q$5@news.albasani.net>
Source record: 37117

Michael Coslo wrote:

> ...
> When taken to its extreme, the practitioner ends up believing every
> alternative theory, and is skeptical toward all established ones.
>
> - 73 de Mike KB3EIA -

I would have loved to have you and I present during the first Wright brothers experiments in flight, the first research into developing masers and lasers (buck rogers ray gun, really), the first reach into interplanetary exploration, etc., etc., etc.

I could have prophesied your stand and arguments perfectly, they would simply have appeared as they do now ...

The least you could do is fake an open mind ... just to fool us now and then.

Regards,
JS

704. MI5 Persecution: David Hepworth (1) 26/2/97 (10280)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 16:31:22 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072016311979@4ax.com>
Source record: 37118
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Subject: "Absolute Obscene" David Hepworth (GLR)
Newsgroups: uk.misc,uk.legal,alt.radio.uk,uk.media,uk.media.radio.misc
Organization: Toronto Free-Net
Summary:
Keywords:

Last night (21/Feb/97), I was listening to BBC GLR. You have to understand that I was listening by stealth. Back in 1990 I used to have Capital blaring out of the speakers all over the garden ("if he listens to Capital then he can't be all bad", thanks ever so much). But now I listen on my walkman on headphones with the volume turned right down. It could not possibly be overheard by any listening device, no matter how sensitive, because sound does not carry from the headphones.

Yet somehow they are still able to tell which station I am listening to on the walkman. And last night, I bravely tuned to GLR 94.9FM at around 8.45pm. Everything went well for the first half hour or so. The DJ (today GLR told me it was David Hepworth) had a "rock star spelling competition" (how do you spell Shakespear's Sister?), no trouble there. I was recording the show onto tape just in case anything unpleasant happened, as I had reason to think it might.

Around 9.10pm, it did. Here, precisely, is what Hepworth said after the song "Come Around" by the Muttonbirds (I have this on tape, and at some point will be posting the audio on my website);

"New album's called 'Envy of Angels', that comes out soon, that's the single that's already out, I would imagine, that's 'Come Around', the Muttonbirds, er, coming up after this, we got the rock-and-roll A-level, we have, I assume, Brian do we have an embarrassment of prizes in there, we do, don't we, (EMPHASIS) absolute obscene (END-EMPHASIS) amounts of prizes, there will no doubt be a riot at the back door", and that's, er, A-level coming up after this"

The key phrases in what he said are, "EMBARRASSMENT of prizes", and what he himself emphasized verbally, "ABSOLUTE OBSCENE amount of prizes". It is my belief (based on content and tone of voice) that when he spoke these phrases he knew I was listening, and that the phrases refer directly to my situation. The "EMBARRASSMENT" is the embarrassment he and other media people would feel at having their wrongdoing exposed; the "ABSOLUTE OBSCENE" (which he verbally emphasized) described the disgusting sexual abuse which the harassers have been throwing at me.

Needless to say, I can't prove this is what he meant, although this has happened enough times that it's hard not to recognise it when you see it. But I shall be sending him a copy of this explanation. We'll see what he has to say for himself.

.....
Subject: Re: "Absolute Obscene" David Hepworth (GLR)
Newsgroups: uk.misc,uk.legal,alt.radio.uk,uk.media,uk.media.radio.misc
Followup-To: uk.misc,uk.legal,alt.radio.uk,uk.media,uk.media.radio.misc
References: <E60IAy.CL5.0.bloor@torfree.net> <330f2bac.2665181@nntp.best.com> <331372$
Organization: Toronto Free-Net
Distribution:

Anthony@dircon.co.uk-antispam (Anthony) wrote:

>Greg W wrote:
>
>> On Sat, 22 Feb 1997 16:11:22 GMT, bu765@torfree.net (Mike Corley)
>> wrote:
>>
>> >Last night (21/Feb/97), I was listening to BBC GLR. You have to understand
that
>> >I was listening by stealth. Back in 1990 I used to have Capital blaring out
of

[snip]

>> huh?
>
>I can't understand it myself. Can anyone else help us ?

I will try to explain with greater clarity.

I am prone to have ideas of "interactive watching" by people on TV, and
"interactive listening" by people on the radio; which means as I listen to
their programme, they are aware that I am listening (because my home is spied
on, and those doing the spying phone up the radio station and tell them that I
am listening to them), and they then interject nasty remarks in what they say.
This is what I believe may have happened on Friday night with GLR, and what I
was trying to explain in my article.

It's happened before with other radio stations, most worryingly when I am
listening quietly on my walkman as happened on Friday. This time, the
interjected words were "embarrassment" and "absolute obscene". The "absolute
obscene" referred to the abuse which is currently being directed at me.

I hope that's a little clearer.
.....
From: simon@star-one.org.uk (Simon Gray)

Facility thusly:

~ huh?

Just because you need to read it twice in order to understand it, is
that any reason to inflict it on the rest of us again ?

--
'2% of people *do*, 98% of people wish they *had*' - David Fanshawe

http://www.mahayana.demon.co.uk/ Read Flatland !
.....
Mike, try playing a cassette in your walkman. There is no way they can
reach you then. HTH

--
Don Whybrow - Correct email address: don@whybrow.demon.co.uk
.....
Mike Corley wrote:

> ..... This time, the
> interjected words were "embarrassment" and "absolute obscene". The "absolute
> obscene" referred to the abuse which is currently being directed at me.

But it is possible that those two sets of interjected words could have
validly referred to something else.

> I hope that's a little clearer.

Thank you, it is a bit clearer.

Posted in uk.legal by Anthony@dircon.co.uk
.....
Simon Rushton <Simon@ppushers.demon.co.uk> wrote:
>Some people, new to this group, may not realise the Mike is our resident
>Paranoid Schizophrenic. This is not a joke, it is serious. He has
>already admitted stopping taking prescribed drugs for his condition.

Though I have to say I've never heard one as obscure as that, even
from Mike. How he can believe a rubbish trail for a crap competition
is directed at him is beyond me!
He's sent a copy of the post to the jock, too. I hope he doesn't read
it out.

--
The John Shuttleworth Homepage:
It's just an Austin Ambassador of a site!
http://www.steviep.demon.co.uk/shuttle.htm
.....

10280

--
Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------>>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

705. MI5 Persecution: Striking out action 10/3/97 (11503)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 16:57:19 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072016571526@4ax.com>
Source record: 37119
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Subject: "Scandalous, Frivolous or Vexatious"
Newsgroups: uk.misc,uk.legal
Organization: Toronto Free-Net
Summary:
Keywords:

A couple of weeks ago I issued a summons against the BBC in my local county court, for the tort of private nuisance caused by the spying by their newsreaders on my home. My argument was that their spying had prevented me watching the news at home, and therefore interfered with my normal use of my home.

The BBC's Litigation Dept at White City have replied not with a defence, but with an application for my claim to be struck out because;

(a) it discloses no reasonable cause of action; and/or
(b) it is scandalous, frivolous or vexatious.

Their application will be heard next week. They have not made any affidavit in support of their application, nor have they given particulars as to why they consider my summons to be unarguable in law, which would be a necessary condition for there to be no reasonable cause of action.

I am more worried about point (b). Allegations are scandalous (says Stuart Sime's book) if they impute dishonesty against another party; which my allegations do, against the BBC's newsreaders. As for frivolous or vexatious, I think that will be up to me to make a good argument for the effect the BBC's spying has had on my life, and up to the district judge's opinion of my case.

Apparently seeking to have a claim struck out in this way is common practice when the plaintiff is a litigant-in-person. Even if it is struck out, there is always the opportunity to appeal. I think we could be in for a fight next week.
.....
Sun, 02 Mar 1997 20:38:59 uk.legal Thread 52 of 54
Lines 13 Re: "Scandalous, Frivolous or Vexatious" Respno 1 of 1
Kate@carterce.demon.co.uk KKKKatie

In article <NQoVQiAnHgGzEwl3@solicit.demon.co.uk>
andy@solicit.demon.co.uk "Andrew Nichols" writes:

> Well, that'll liven up the dear old District Judge. Almost worth taking
> the day off to see how Mike fares.

almost worth taking a day off to see if he exists

Kate
--

Just back from the US - you've got to love a country that puts
"Vertical Clearance Impeded" for "Low Bridge"
.....
Subject: Re: "Scandalous, Frivolous or Vexatious"
Newsgroups: uk.misc,uk.legal
References: <E6FEFJ.IE7.0.bloor@torfree.net> <NQoVQiAnHgGzEwl3@solicit.demon.co.uk><8$
Organization: Toronto Free-Net
Distribution:

burridge@osiris.win-uk.net (Paul Burridge) wrote:
>Almost worthwhile taking the day off to go and punch him in the
>face for all abuse he's given us on these groups. Which court is it?

Thank you for your kind thought.

I'm not telling you which court it is. I don't want to be hounded by irate
uk-miscreants!

As for raising eyebrows, the member of staff who took the summons form didn't
change their facial expression at all. Seen it all before, no doubt.
.....
In article <857597450snz@adams.demon.co.uk>,
Derek Tidman <Derek@adams.demon.co.uk> wrote:
>In article <E6JAxt.EFK.0.bloor@torfree.net>
> bu765@torfree.net "Mike Corley" writes:
>
>-I'm not telling you which court it is. I don't want to be hounded by irate
>-uk-miscreants!
>-
>-As for raising eyebrows, the member of staff who took the summons form didn't
>-change their facial expression at all. Seen it all before, no doubt.
>
>Take no notice Mike, some people are like that. I hope
>you finally get this matter into court.

I'm not so fond of the threats of violence against the persistent (yet
quiet for a bit, and probably soon to restart..) spammer that is Mike
Corley. Yet, encouraging the fantasies of the mentally ill isn't
exactly healthy either. Do you go up to homeless mad people as say
things like: "They're coming to get you", or "Look out behind you?".

Smid
.....
Quite the contary Mike. Your recent posts have been no problem. By
explaining things rationally, and not spamming us, you have made more
friends than you know.

I hope that you sort out your problem, sincerely.
--
****
I'm Alan Packer and I move in a very mysterious way. If replying to me
.....

In article <857686006snz@adams.demon.co.uk>,
Derek Tidman <Derek@adams.demon.co.uk> wrote:
>In article <5fmdc7gga1@ftel.ftel.co.uk>
> J.J.Smith@ftel.co.uk "John J Smith" writes:
>
>I think it's good for Mike to vent his anger and frustration on
>these two newsgroups. Consider it to be part of your duty to
>the comunity in general.

Yep. Just not, the, I think 180 posts, one week, when his illness
got really bad. Oh yeah, and there was only three real posts,
just repeated 60 times.

>Mike does a first class job of drawing out the real personality
>of the person hiding behind a node name. The way people react
>to Mike gives it all away.

Erm, explain this rather dubious statement.

>As for you. Don't you think it's a trifle condescending to refer
>to people as mad. I know they are homeless and without internet
>access, but maybe they are just eccentric.

Congratulations. This is my first real flame for about a year.

I try to control my anger when I come across another uninformed
naive idiot on usenet, but sometimes it goes free. We've had Corley
for well over three years now, and his constant spams of various degrees
have killed a couple of usenet groups I really rather lied. uk.media,
to name but one. I gets my goat to read another useless fucker
thinking he is a harmless eccentric.

Mike is mentally ill. He is unwilling to deal with it. He seems to
think that uk.misc is some sort of forum that MI5 reads. And it
should be avenged. He's mailbombed a large quantity of people,
because they opposed his spamming.

1. He thinks MI5 watches him through his television
2. He thinks all references to mad people, refer to him
3. He thinks all people shouting, are shouting at him.
4. He's been diagnosed as mentally ill, just not a paranoid
schizophrenic.
5. He gives not a shit about any newsgroups he abuses.
6. He goes through quiet periods, then _very_ nasty periods.
7. All evidence of this great conspiracy is laughable, to say the
least.
8. He gives internet/usenet a bad name to the media. Including
mailbombing Chris Tarrant and faxing various celebrities.

I do not condescend to him. I actually know what he does, and has done
in the past, and am frankly not too respectful of him. He can be openly
referred to as "mad" because he is. Let's check my mailbox saves:

Repost of when I thought I'd seen the last of loopy mike:

>>J.J.Smith@ftel.co.uk (John J Smith) wrote:
>>Actually, I see uk.misc as a source of occasional interesting information,
>>and I like jokes. Some people can laugh, you see.
>>
>>And as for you spams, exactly how much good have they done so far?
>
>Not much. I thought they might, but the realization has arrived that this
>particular avenue of exploration is at a dead end.
>
>WTGROMT (well that's got rid of me then!)

Have you actually visited his web page, and read the massive conspiracy
that is supposed to be against him? Apparently MI5 watch him, but for
no reason. They do it for a laugh. Because they can. It costs them a lot
of money, but they still do it. Reality is but a memory for this man.

>Anyway I understood the UKMTC members upset Mike Corely , but
>I could be wrong.

Heaven forbid.

Smid
.....
From: burridge@osiris.win-uk.net (Paul Burridge)

In article <33207CAA.1097@sos.bangor.ac.yuk>, David Roberts (oss108@sos.bangor.ac.yuk)
writes:
>Derek Tidman wrote:
>
>> Anyway I understood the UKMTC members upset Mike Corely , but
>> I could be wrong.
>
>There was a pitched battle between MC and "the artist formerly
>known as Big Ears" but that was before the UMTC by which time
>MC had seen the light and stopped spamming.

He hadn't seen the light at all. His level of spamming had got to
such outrageous proportions that we had to mount a concerted
attempt to get his account(s) closed. The reason for the lack of
spam lately is that Mike has been furiously swotting up on Law so
he can bring an action as a LIP against the BBC (all solicitors
having quite rightly and honourably declined to act for him). When
this course of action is exhausted without result, I confidently
predict that we will once again be the innocent victims of his ire
and the spamming will commence again.
.....

11503

--
Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------>>>>>>http://www.NewsDemon.com<<<<<<------

Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

706. MI5 Persecution: I am being ignored 17/4/97 (12726)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 17:28:49 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072017284533@4ax.com>
Source record: 37120
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Subject: I am being ignored
Newsgroups: uk.misc,uk.legal
Organization: Toronto Free-Net
Summary:
Keywords:

Something mildly unusual is happening. Nobody has been getting at me for the last couple of weeks. Best of all, about three weeks ago I bought a video recorder to try to get some evidence from the News etc, and despite having watched Martyn Lewis, Michael Buerk and the whole lot of them, not one of them has said anything to me in the last three weeks. And I have been listening to and recording Capital, with no ill effect. All in all, I am being comprehensively ignored.

Of course, I should have video-taped the news programmes back in 1990/91/92 (and even 93) when it was still all going on. Anthony Johnsson (casually name-drop to stick the knife in) will tell you how intelligent a person I am, yet I didn't have the good sense to record the programmes at the time, and it's a bit late now.

Today another avenue of exploration closed when my second summons against the BBC was struck out (basically through lack of evidence), and an order was made by the district judge saying that I could not sue John Birt again without the express permission of the court. She explained that this was for my own good, to save me the summons fees. Costs were not awarded though (the BBC didn't even really seek costs), and I am free to sue anyone else I take a shine to.
.....
It is not that you are being ignored.... it is just that as your mental health improves, so your paranoia eases.

OR...

The dark forces are gathering strength for the final battle with you...

Seriously though, it's nice to see you back - cos as long as they are persecuting you, I can relax knowing they haven't got time to bother me!

Harry
--
Harry Adams
harry@smcat.com
http://www.smcat.com
.....
From: burridge@osiris.win-uk.net (Paul Burridge)

Great news! Keep taking the tablets.
.....
(posted 11/apr/1997, re Neil Long at 8.35pm Capital Radio)

Subject: Re: I am being ignored
Newsgroups: uk.misc,uk.legal
Followup-To: uk.misc,uk.legal
References: <E8HKJw.LIK.0.bloor@torfree.net>
Organization: Toronto Free-Net
Distribution:

Mike Corley (bu765@torfree.net) wrote:

[unreasonable optimism snipped]

Well, that didn't last very long, did it?

Capital Radio this evening approx 8.35pm, Neil Long's programme a few moments after I switched to it (I am listening to it as I type this). The following spouted from his mouth;

"want to see Jacko in town? what a gig it's going to be, that guy is amazing, and PSYCHOTIC, but amazing on stage, 0171-4200958, on stage he's a MADMAN but he's wonderful"

God, I am so tired of this. It's been going on for seven years. When's it going to stop?

I have the above extract on tape. When I get around to it I will post it, and the Hepworth snippet, as audio files on the website. Of course, all the doubting Thomases and Smids can carry on doubting, because the mere fact that moments after switching on the DJ starts talking about "psychotic", that's not proof is it?

I wrote an aggrieved letter to Chris Tarrant at Capital and sent it off today, copied to Richard Park, Group Director of Programmes. I suppose they'll just lie as usual. Bastards, basically.
.....
The solution is surely to not have a TV, video, radio or telephone in the house, Mike. That way they can't be used to watch you.

Dave
--
dave@ llondel.demon.co.uk
Any advice above is worth what I paid for it.
.....
Subject: Re: I am being ignored
Newsgroups: uk.misc,uk.legal
References: <E8HKJw.LIK.0.bloor@torfree.net> <E8HpM1.608.0.bloor@torfree.net> <860893$
Organization: Toronto Free-Net
Distribution:

"Dave {Reply address in.sig}" <noone@llondel.demon.co.uk> wrote:
>The solution is surely to not have a TV, video, radio or telephone in
>the house, Mike. That way they can't be used to watch you.

No. I tried that strategy in 1990/91 when I sold my television and stopped
listening to the radio. It didn't work because they got at me through
co-workers and eventually the general public.

The solution is to gather evidence by recording everything, and then complain
or sue if possible. I wish I'd recorded it all five or six years ago, then I
might be more successful in a legal action now.
.....
Did anyone else watch the X-Files on Sky last night (Sunday 13th April) and
recognise Mike's symptons in the chap with the tattoo? It was quite
interesting to see someone responding in precisely the same way, picking up
on individual words and phrases in ordinary sentences and applying parts to
themselves as though they were intended.

Not a pleasant ending though. You take care, Mike, and keep taking the
medication. uk.misc just wouldn't be the same without you now.

Claire
--
****
* Claire Speed [ENTX] * Network & Operations Unit, Manchester Computing *
* Dial-up, ISDN, TICTAC * C.Speed@mcc.ac.uk http://www.mcc.ac.uk/Claire/ *
****
.....
>moments after switching on the DJ starts talking about "psychotic", that's not
>proof is it?

No, it isn't, but you knew that anyway.

Mike, how is it that you think that this can't be a coincidence because
it happened 'moments' after you switched on the radio? Haven't you just
told us that you haven't heard a thing for two weeks? Going two weeks
watching TV & listening to the radio without a reference to 'mad', 'crazy'
or 'loony' is quite an acheivement, especially given the trashy radio you
seem to prefer.

I've just spent a lot of the weekend trying to keep a manic depressive
under control, so that she doesn't have to go back into hospital and
lose the last few months' memories to ECT. One thing I've noticed is
that manic depressives almost seek to foster their fantasies, they
enjoy the control and the high. You seem to be the same - you refuse
to answer the points put to you that explain away what you call persecution
totally - do you have the courage of your convictions to reply to this?
Or do you enjoy the attention your illness brings you?

--
Illtud Daniel idaniel@jesus.ox.ac.uk
-see Twin Town- -Buy Apollo 440-
.....
Mike Corley wrote:

> Something mildly unusual is happening. Nobody has been getting at me for the
> last couple of weeks.

Do please tell the *truth*. It has been longer than *2* weeks as I'm sure
you have noticed, hasn't it ?

Well I claim responsibility for the absence of persecution. When I rang
John Major's personal private secretary, not the personal political one or
any of the others in the same office, and I said you would vote for the
Conservative Party at the General Election the secretary said Johnny would
be so happy and as a sign of gratitude he rang-up the Head of MI5 and told
them to save money for tax cuts by abandoning forthwith their campaign
against you. Consequently MI5 and MI6 have been able to redeploy urgently
needed resources (i.e. manpower and telecoms interceptions) against an
international band of (*****censored*****).

On behalf of the law-abiding and decent citizens in the British islands, I
would like to sincerely thank you for your invaluable contribution to
crime fighting by your instrumental achievement in releasing badly needed
and very scarce MI5 and MI6 resources.

Many thanks,

> Best of all, about three weeks ago I bought a video recorder to try to get some
> evidence from the News etc, and despite having watched Martyn Lewis, Michael
> Buerk and the whole lot of them, not one of them has said anything to me in the
> last three weeks. And I have been listening to and recording Capital, with no ill
> effect. All in all, I am being comprehensively ignored.

Please don't forget it is National Election time and the news broadcasts
at 21:00 on BBC1 are preoccupied with British politics.

> Of course, I should have video-taped the news programmes back in 1990/91/92
> (and even 93) when it was still all going on.

Any particular date in mind ? I have a few in the library. You can also
purchase copies from the BBC on 0181-743 8000 (central switchboard).

> Anthony Johnsson (casually name-drop to stick the knife in) will tell you how intelligent
> a person I am, yet I didn't have the good sense to record the programmes at the time,
> and it's a bit late now.

Perhaps it is for the best. Now that it is all over, you can return to
Canada. Did you manage to get your Canadian citizenship ? What did your
contracts at MI5 say about you becoming Canadian ? You never did mention
the name of your MI5 liaison officer nor of any of the others.

> Today another avenue of exploration closed when my second summons against the
> BBC was struck out (basically through lack of evidence), and an order was made
> by the district judge saying that I could not sue John Birt again without the
> express permission of the court. She explained that this was for my own good,
> to save me the summons fees. Costs were not awarded though (the BBC didn't even
> really seek costs), and I am free to sue anyone else I take a shine to.

That's true. But as it is now all over there is no need to worry about
the past. MI5 said your file has been removed from the Registry and put
in a burn-bag so there is nothing left for anyone ever to find.

By the way, what was the URL of your famous Corley web site ?
.....
Subject: Re: I am being ignored
Newsgroups: uk.misc,uk.legal
Followup-To: uk.misc,uk.legal
References: <E8HKJw.LIK.0.bloor@torfree.net> <E8HpM1.608.0.bloor@torfree.net> <5it60e$
Organization: Toronto Free-Net
Distribution:

Illtud Daniel (idaniel@jesus.ox.ac.uk) wrote:
: Iain L M Hotchkies <iain@hotch.demon.co.uk.spam-free.zone> wrote:
: >Illtud Daniel typed:
: >
: >> You seem to be the same - you refuse
: >> to answer the points put to you that explain away what you call persecution
: >> totally - do you have the courage of your convictions to reply to this?
: >> Or do you enjoy the attention your illness brings you?

I have to admit that it is actually mildly amusing to have newsreaders watching
you, although it is tiresome after a bit. I am currently in an interesting
situation, because after my lawsuits against them I think the BBC newscasters
have stopped watching me entirely; I also think that ITN, in particular John
Suchet, *are* still watching but they're being subtle about it (his blink
pattern followed mine).

Being called nasty words is quite horrible though, and seems gratuitous; what
do they gain by it, except to exercise their sadism?

: >I think we all ought to remember that schizophrenia is a
: >psychosis, and as such, unless you are American and believe
: >that *anything* can be dealt with through counselling and/or
: >psychotherapy, will not respond to this type of treatment.

: Tell me about it. My friend is now unhappily resident in Warneford
: mental health unit, or whatever they call psychiatric hospitals nowardays.

I've never been in a hospital as an in-patient, ever. I think I've been very
lucky in that regard.

: Having said that, one should seek to disabuse even psychotics of their
: delusions.

The medicines haven't made any difference to my ideas. They obviously make a
difference in the emotional impact and reaction.
.....
>I've never been in a hospital as an in-patient, ever. I think I've been very
>lucky in that regard.

You have. They're not pleasant atmospheres, especially the secure wings,
which have more in common with prisons ('airlock' doors, list of 'banned'
articles, continuous observation). They have to be that way, unfortunately.

--
Illtud Daniel idaniel@jesus.ox.ac.uk

-see Twin Town- -Buy Apollo 440-
.....

12726

--
Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

707. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 17:49:06 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fack6q$12ns$1@f04n12.cac.psu.edu>
Source record: 37121

John Smith I wrote:
> Michael Coslo wrote:
>
> > ...
>> When taken to its extreme, the practitioner ends up believing every
>> alternative theory, and is skeptical toward all established ones.
>>
>> - 73 de Mike KB3EIA -
>
> I would have loved to have you and I present during the first Wright
> brothers experiments in flight, the first research into developing
> masers and lasers (buck rogers ray gun, really), the first reach into
> interplanetary exploration, etc., etc., etc.

> I could have prophesied your stand and arguments perfectly, they would
> simply have appeared as they do now ...
>
> The least you could do is fake an open mind ... just to fool us now and
> then.

Why don't we move this into the realm of discussion rather that you noting that you know exactly what I am going to do or say (some might thing that is evidence itself of a closed mind)

What do you think about this Superluminal speed experiment in comparison to the Smarandache hypothesis?

Tunneling time in itself is expected to be zero in superluminal phenomena. Interesting.

F. Hund in 1927 noticed Tunneling in 1927. It is some pretty old physics. It is also a natural outgrowth of quantum mechanics. It is needed to explain how the sun works, and even the inflationary universe.

Your thoughts?

- 73 de Mike KB3EIA -

708. MI5 Persecution: Peak Practice 26/4/97 (13949)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 18:04:36 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072018043267@4ax.com>
Source record: 37122
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Subject: "Peak Practice" 1/4/97 wanted
Newsgroups: uk.misc,rec.arts.tv.uk.misc
Organization: Toronto Free-Net
Summary:
Keywords:

I am looking for a recording of "Peak Practice" from yesterday 1.April on VHS
tape. Willing to pay a reasonable sum for a recording.
.....
Mike Corley <bu765@torfree.net> wrote:

>I am looking for a recording of "Peak Practice" from yesterday 1.April on VHS
>tape. Willing to pay a reasonable sum for a recording.

Uh-oh. Peak Practice slagging you off as well now, eh Mike?

--
Illtud Daniel idaniel@jesus.ox.ac.uk
-see Twin Town- -Buy Apollo 440-
.....
Subject: Re: "Peak Practice" 1/4/97 wanted
Newsgroups: uk.misc,rec.arts.tv.uk.misc
Followup-To: uk.misc,rec.arts.tv.uk.misc
References: <E80u0B.8qD.0.bloor@torfree.net> <5i0onj$c9n@news.ox.ac.uk>
Organization: Toronto Free-Net
Distribution:

>Uh-oh. Peak Practice slagging you off as well now, eh Mike?

You better believe it. Tuesday's episode had one of its characters being
labelled as a "lunatic" with "something wrong with them". I changed channels
rapidly at this point, but in retrospect perhaps I should have carried on
watching and taped the program.

A few days ago I bought a video recorder (about time too) for evidence
gathering purposes. But strangely the TV news (both BBC and ITN) haven't
uttered a sound over the last few days. Almost as if they know they're being
taped...
.....
Mike Corley <bu765@torfree.net> wrote:
>>Uh-oh. Peak Practice slagging you off as well now, eh Mike?
>
>You better believe it. Tuesday's episode had one of its characters being
>labelled as a "lunatic" with "something wrong with them".

And?

There are many characters in TV programmes who _are_ lunatics with
'something wrong with them'. Why do you think this alludes to you?

In the eponymous book, Cervantes' Don Quixote is described as 'crazy'
'mad' and 'lunatic'. Do you think this is a reference to yourself,
albeit written by a time-travelling 17th century Spaniard?

If you accept that the character of Don Quixote can be described thus
without it being a reference to you, what problem do you have with
Peak Practice? Or do you enjoy tilting at your own little windmills?

A friend's lodger has turned out to be paranoid schizophrenic. Her
obsessions are strikingly similar to yours, she is convinced that she
is being bugged, and that students at her college are making fun of
her for being foreign. She has been looking for the services of a
private detective. Maybe Oxford has this unfortunate effect on foreigners?

I must say that I'm surviving rather well, or that's what the man
under the stairs told me yesterday.

--
Illtud Daniel idaniel@jesus.ox.ac.uk
-see Twin Town- -Buy Apollo 440-
.....
So Mike, you are a woman, married to a doctor,have two children, speak
spanish, and living in the Peak District. Is that a fair description of
you?

BAZZA
.....

13949

--
Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
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Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

709. Re: Quantum Tunneling

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 18:14:45 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <faclmm$vo3$1@news.albasani.net>
Source record: 37123

Michael Coslo wrote:

> ...
> What do you think about this Superluminal speed experiment in comparison
> to the Smarandache hypothesis?
>
> Tunneling time in itself is expected to be zero in superluminal
> phenomena. Interesting.
>
> F. Hund in 1927 noticed Tunneling in 1927. It is some pretty old
> physics. It is also a natural outgrowth of quantum mechanics. It is
> needed to explain how the sun works, and even the inflationary universe.
>
> Your thoughts?
>
>
>
> - 73 de Mike KB3EIA -

Isn't it quite obvious, it is too early to settle on "hard facts."

Indeed, I have made no bones about my belief(s), at a future date the ether will come into play in all this, something we are simply ignoring at this date.

It seems all are aware when Einstein denied the existence of the ether (luminal ether really), and few are aware when he reneged and made provision for it (since it simply passes though the sides of any bottle which we can construct to contain it, its' makeup remains a mystery) ... you are too impatient, you want all the answers to the universe--immediately. Beware, in your haste you may choose wrong.

I have found great enjoyment in pondering "its'" remaining mysteries ... the CERN project will shed more light upon all of this ... one can always hope it will "provide all the answers", however, I think, probably not.

If this all seems rather cryptic and evasive, such is the very nature of this beast.

Regards,
JS

710. MI5 Persecution: Continuing Silence 9/5/97 (15172)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 18:25:06 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072018250371@4ax.com>
Source record: 37124
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Subject: The Continuing Silence
Newsgroups: uk.misc
Organization: Toronto Free-Net
Summary:
Keywords:

The silence continues. I am enjoying listening to Radio 4 without any ill
effects whatsoever. Admittedly I am recording every moment, but still. Even
better, I have fished out a recording from ITN last year which at the time I
was convinced had been about me, and on re-seeing it I am now convinced it is
not about me at all.

But that is not to disclaim all the many "live incidents" that have happened.
Everything written on my website is true. For the newcomers, its URL (as seen
in the Observer and Private Eye) is

[snip]
.....
Mike Corley wrote:
>
> The silence continues. I am enjoying listening to Radio 4 without any ill
> effects whatsoever.

Already the New Labour govt improves the quality of life of the
populace!

--
To reply by email you must delete the trailing x from the To: field
Why not drop by my web page sometime? http://www.man.ac.uk/~zlsiida
Manchester's cheapest poker game still needs more players - drop me
a line if interested, or if you know another game that I might like.
.....
From: David Roberts <oss108@sos.bangor.ac.yuk>

Mike, you're a ray of sunshine on a cold and miserable day.
Long may the silence continue.

David
--
**********==========**********
Right that's enough junk mail.
If you really want to e-mail me,
remove the y from my address
.....
>better, I have fished out a recording from ITN last year which at the time I

>was convinced had been about me, and on re-seeing it I am now convinced it is
>not about me at all.

You've cheered me up with this news, Mike. Seriously. The last sentence
suggests that your health is improving, and you are beginning to become
pragmatic, in some way...

Take a deep breath, and look to the future. I wish you well.

Smid
.....

15172

--
Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------>>>>>>http://www.NewsDemon.com<<<<<<------
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711. MI5 Persecution: Victor Lewis-Smith 9/5/97 (16395)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 18:47:54 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072018475169@4ax.com>
Source record: 37125
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Victor Lewis-Smith has broken the silence in his TV review column "Goon and best forgotten" in the Evening Standard (on Thursday 8/May). He said, "If I sound paranoid, that's probably because I once worked there. Eventually, I had to leave because they were all trying to kill me but, for sheer pathological hatred of the Corporation, I couldn't hold a candle to Spike Milligan".

I take this to be about me, because recently I wrote to both the BBC and Capital Radio, saying "I believe the current purpose of the harassment is to force me to kill myself to prevent the harassers, yourselves included, from being brought to justice, and last year there were several incidents of people shouting 'suicide' at me, which would appear to corroborate that view." I think VLS's words about the BBC "all trying to kill me" shows he has seen or heard of what I sent to the BBC or Capital.

Nasty eh? I believe that VLS or his mates read this newsgroup. I wonder how he would explain his article?

.....
Date: Fri, 9 May 1997 23:11:40 +0000 (GMT)
From: Webmaster for Victor <vls@bbcradio.demon.co.uk>
To: Mike Corley <bu765@freenet.toronto.on.ca>
Subject: Re: paranoia

Dear Mike,

Victor's not writing about you.

Yours,

John Hayward-Warburton
Victor's Webmaster

.....
For some reason, I don't quite believe you. It's just too close a match.

.....
In article <E9xG0x.Gtr.0.bloor@torfree.net>,
Mike Corley <bu765@torfree.net> wrote:
>Victor Lewis-Smith has broken the silence in his TV review column "Goon and
>best forgotten" in the Evening Standard (on Thursday 8/May). He said, "If I
>sound paranoid, that's probably because I once worked there. Eventually, I had
>to leave because they were all trying to kill me but, for sheer pathological
>hatred of the Corporation, I couldn't hold a candle to Spike Milligan".

Erm, Mike, I'm a bit of a fan of Victor Lewis-Smith, ever since his days of "BuyGones". I must admit, he often likes to play the flawed lunatic evil nasty person. He's been doing it for years, with prank calls, far before your illness. Its his act. He wouldn't be VLS without it.

He doesn't like the "Goons" either. It isn't about you.

>I take this to be about me, because recently I wrote to both the BBC and
>Capital Radio, saying "I believe the current purpose of the harassment is to
>force me to kill myself to prevent the harassers, yourselves included, from
>being brought to justice, and last year there were several incidents of people
>shouting 'suicide' at me, which would appear to corroborate that view." I think
>VLS's words about the BBC "all trying to kill me" shows he has seen or heard of
>what I sent to the BBC or Capital.

I don't think Victor Lewis-Smith has worked for the BBC (or Capital) for
several years (1994 was the last time...), so the connection, is paranoia
here.

Personally, I believe VLS as a person of reasonable integrity, who wouldn't
give a fuck about you...

>Nasty eh? I believe that VLS or his mates read this newsgroup. I wonder how he
>would explain his article?

Keep up the medication, not as many people read this newsgroup as you think,
even though you are now incorporating that into your illness.

Victor? Are you there?

Smid
.....

16395

--
Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
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712. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 19:09:15 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <facosq$72t$1@news.jpl.nasa.gov>
Source record: 37129

> A packet is a surprisingly delicate thing. It takes nowhere near
> hypothetical 100 percent saturation with an RF signal to change one bit,
> which can disrupt a packet.
>
>
>> Digital is magnitudes more robust than analog, again owing to the very
>> nature of the beast and the simplicity of the on/off, pulse width,
>> timing nature of the signal.
>
>
> John I might respectfully suggest that you do a little studying on
> the nature of digital signals. I've been dealing with them since the
> late 70's, and they aren't anywhere near as robust as you believe.

Depends a lot on the encoding technique used. Amateur HF packet using surplus Bell 202 modems is pretty bad in terms of interference handling. COFDM with a rate 1/4 FEC is pretty good.

One needs to select a coding suited to the channel (e.g. using the coding used for getting 56 kbps through a 3kHz phone line is probably not appropriate for a ionospheric HF path).

I would venture to say that with today's technology, one should be able to get within 0.5dB of the Shannon limit without too much trouble. So, since a BPLish signal can be many MHz wide, and the putative interfering signal is going to be pretty narrow band in comparison, they can code around it.

>
> - 73 de Mike KB3EIA -
>
>
>

713. MI5 Persecution: David Hepworth (2) 16/5/97 (17618)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 19:13:15 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072019131279@4ax.com>
Source record: 37126
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Subject: David Hepworth (GLR) is taking the piss
Newsgroups: uk.misc
Organization: Toronto Free-Net
Summary:
Keywords:

>Last night (21/Feb/97), I was listening to BBC GLR. You have to understand that
>I was listening by stealth. Back in 1990 I used to have Capital blaring out of

Not much changes. Today I was listening again to David Hepworth's show on GLR,
having more or less waded in on it by accident. Here is the exchange;

David: "we have executive drivetime, we have Brian in charge of the prize
cupboard. Brian it's not a bad prize cupboard this week is it?"

Brian: "no David it's an absolute (EMPHASIS) embarrassment (END-EMPHASIS) of
prizes this evening" (laughter)

David: "what have we got?"

Brian: "well in my left hand alone we've got that .... Gary Clale, I don't know
if you remember him obviously still alive and kicking...."

David: "Rock and roll spelling test is your first opportunity to take advantage
of this embarrassment of prizes"

What do I read into this exchange? The laughter after the word "embarrassment"
shows they're aware of the last complaint I made on usenet (copied by
snail-mail to them). The "left hand" business is I think a coded way of calling
me a w***er (the term would be better applied to Brian and David).

I have a tape of this exchange, and will eventually get around to posting it on
the website.
.....
Subject: Re: David Hepworth (GLR) is taking the piss
Newsgroups: uk.misc
References: <E9xMvw.4H2.0.bloor@torfree.net>
Organization: Toronto Free-Net
Distribution: uk

I don't understand. Why has nobody replied to this post? You keep on asking for
evidence, then I present you with something that looks very much like evidence,
and everybody just ignores it. OK I haven't posted the actual sound extract,
and it still isn't proof.

Perhaps everybody just finds it all too boring and dull. Should I start
spamming again from one of those nice anonymous remailers to wake everyone up?

Now there's a thought.

.....

Mike Corley <bu765@torfree.net> wrote:

>I don't understand. Why has nobody replied to this post?

Cos you don't reply to our points - you're ignoring us, why shouldn't
we ignore you?

>You keep on asking for evidence, then I present you with something
>that looks very much like evidence,

No you don't, you post something which could _never_, _ever_ be construed
as referring to yourself. Can't you see it? No, of course you can't,
you've an illness.

>Perhaps everybody just finds it all too boring and dull. Should I start
>spamming again from one of those nice anonymous remailers to wake everyone up?
>Now there's a thought.

And I see you've started. Give it a rest, Mike, unless you're prepared to
enter into proper discussion.

--

Illtud Daniel idaniel@jesus.ox.ac.uk

-see Twin Town- -Buy Apollo 440-

.....

>Mike Corley <bu765@torfree.net> wrote:

>>I don't understand. Why has nobody replied to this post?

Never read it. Repost?

Smid

.....

In article <5lhg3i$ete@news.ox.ac.uk>,

Illtud Daniel <idaniel@jesus.ox.ac.uk> wrote:

>[reposted]

>

>>Brian: "no David it's an absolute (EMPHASIS) embarrassment (END-EMPHASIS) of
>>prizes this evening" (laughter)

Uh-Uh. He's on for a bad attack, if he's singling out words which are
apparently attacking him. He previously restricted himself to just
dialog about the mentally ill.

TAKE YOUR MEDICATION MIKE.

Smid

.....

17618

--

Posted via NewsDemon.com - Premium Uncensored Newsgroup Service

------>>>>>>http://www.NewsDemon.com<<<<<<------

Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

714. Re: Practical HF Digital Voice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 19:17:18 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <facpbtbnb1@news.jpl.nasa.gov>
Source record: 37130

Bob Bob wrote:
> Isn't half the fun of HF using ones brain as an organic processor to
> pull words out of noisy signals? <grin>
>
> Seriously I always wondered why something like PSKnn became so popular
> when with a bit more code writing on your average PC might have yielded
> a viable digital voice circuit. Maybe your average ham doesn't want to
> say much, only caring to exchange RST's for a card! This is actually
> what deters me from PSK31, most seem to only want a limited contact..
>
> Does anyone know of a sound card/PC system that does digital voice over
> SSB bandwidths? I note the comment about group delay and other problems
> using amatuer transceiver equipment. Could not your rigs characteristics
> be mapped by a "known" station to reduce this problem.

It's certainly possible, but there's a fundamental problem.. the people
who know how to do it are interested in other things. There are a
variety of digital voice modems available (e.g. the AOR box), but the
algorithms are either uninteresting to a would-be experimenter or are
bound in some form of intellectual property protection (e.g. one could
graft a LPC10E vocoder at 2.4 kbps into Pactor3, but why?)

>
> Since we are on the topic, has anyone used PSK31 mobile/moving? Are
> there phase shift issues to be allowed for due to the physical movement
> of the station. Probably more of an issue on VHF than HF.. Looking to do
> some slow PSK/GPS stuff from the car..

I know some people have tinkered with something like this for a form of
HF APRS.. a bit of googling might turn up something.
>
> Cheers Bob VK2YQA
>
>
> John Smith I wrote:
>
>>Even the arrl (Angry Retarded Radio Lizards?) sees the writing on the
>>wall ...

715. MI5 Persecution: Overview (496)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 19:47:24 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072019472117@4ax.com>
Source record: 37127
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Overview

What all these snatches of video and audio, and newspaper articles, have in common is that none of them provide conclusive or very convincing
evidence of their being directed against me, or forming part of a campaign against me. Other people with my illness doubtless could produce similar
non-proof if they were minded to do so.

Good, now we've got the disclaimer out of the way, we can describe precisely what it is that is on display in this part of the site. In the video
section, we have Quicktime (MPEG-4) clips of Jon Snow of ITN in action, also interviews with Ken Clarke and John Major of the ousted Tory regime. These are
embedded in the page using QuickTime. While each audio/video clip is coded to automatically download the QuickTime player, you may find it helpful to
download QuickTime from Apple's website before you start viewing the media files.

Note that each item is awarded a rating of the confidence I feel that it is directed at me, expressed as a percentage. Items with 50% or
more are probably about me; 100% indicates a "dead cert".

In audio we have MP3 files of harassment at work in Canada in late 1996, also GLR's David Hepworth not even trying to pretend that he isn't getting
at me, and a snippet of Capital. There is also an album track which I have taken as being about me. The newspapers section contains articles by Bernard
Levin on his encounter with a madman who "bursts into tears, and swears it is all
true - and it is". Also a Private Eye cover, and snippet from Victor Lewis-Smith.

I have added several recordings of abuse "in public". By Sept/1998 I had seven minidiscs of such recordings, unfortunately containing mostly very
nasty sexual slanders which I will not be publishing on this website. The recordings were made on a Sony Minidisc Walkman MZ-R30, which I purchased
in Canada in July/1997, with ECM-T140 microphone. After both the MZ-R30 and the microphone reached the end of their lives, in June/2001 I purchased as
replacement my current recording gear, an MZ-R900 walkman with ECM-T145 microphone.

Share and Enjoy! I hope you enjoy partaking in my delusions which have been recorded with high fidelity digital equipment and presented for your
listening pleasure.

496

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716. MI5 Persecution: Ken Clarke (1), April 1997 (1719)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 20:03:12 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072020030916@4ax.com>
Source record: 37128
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Ken Clarke (1), April 1997

Certainty level: 30%

The first of two video segments from the same program, this shows
Jon Snow interviewing Ken Clarke in April 1997, during the general
election campaign. The following exchange is heard;

Jon Snow: "You say we are booming in your posters, the bust's around the corner"

Ken Clarke: "You took that from three years ago, when I was being
advised to do all kinds of mad things to stimulate the economy,
and being told that I had to take desperate measures to get it going"

At this time I was watching television almost continuously at home,
with a video recorder whirring away, trying to obtain from the
newscasters a reaction which would give them away. I think this is an
instance where it happened. Ken Clarke first darts a glance straight at
the video camera (and perhaps at a monitor next to it showing my living
room), then comes out with "all kinds of mad things", while engaging in a
facial display involving raising of eyebrows and lowering of eyelids.
To me at the time, and also now, it looked as if he was selecting a
context into which he could drop the word "mad" as a directed insult against me.

1719

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717. MI5 Persecution: Ken Clarke (2), April 1997 (2942)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 20:19:33 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072020192911@4ax.com>
Source record: 37131
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Ken Clarke (2), April 1997

Certainty level: 30%

The second of two video segments from the same programme, this shows
Ken Clarke during the election campaign. He makes the following statement;

"we have a party, and we have a Cabinet which has produced a manifesto
consistent with our policy of the last five years;
people are challenging us on the basis there's been some monstrous
conspiracy between all the politicians to guide us we know not where,
we know where we're going, we wish to be a leading influence in the European Union"

It should be fairly obvious what I read into in the above sentences.
The "monstrous conspiracy between all the politicians" could of course
apply to the public perception of closer European integration, but
I took it as referring to the conspiracy of politicians and
media people against me. Again, facial expression comes into it; as Clarke
speaks of the "monstrous conspiracy" his eyebrows twitch and it is clear
that something or somebody is being made fun of.

2942

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718. MI5 Persecution: Dimbleby / John Major, April 1997 (4165)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 20:36:50 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072020364609@4ax.com>
Source record: 37032
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Dimbleby / John Major, April 1997

Certainty level: 90%

Dimbleby interviews John Major during the election campaign. Here is
the exchange, regarding Neil Hamilton, the "sleazy" Tory candidate;

Dimbleby: "It's a direct quotation from what he said to Sir Gordon Downey
and what he said to his local newspaper, the Knutsford Guardian".
Major: "Well, heaven forfend that I should doubt what the Knutsford
Guardian actually said"
Dimbleby: "Well I should hope so"
Major: "Absolutely, it would be quite unforgivable to doubt the
Knutsford Guardian"

What I find in this segment is an assonance between "Knutsford" and "Nut"
or "Nuts". I think Dimbleby deliberately invents the play on words,
and says it clearly enough for Major to pick it up and repeat it.
You can gauge Dimbleby's intent from his facial expression of false
honesty when he uses the words "Knutsford Guardian"; and Major's reaction
follows from his recognition of Dimbleby's intent; Major smiles and says
it would be "unforgivable to doubt the Knutsford Guardian".
These are much clearer on the original video than on this Quicktime clip.

4165

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
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719. Re: where do I look for this info???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 20:47:46 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <j8bpp4-od6.ln1@p400bob.personal.cox.net>
Source record: 37035

Do a search for "hotspots" maybe?

Take your laptop etc down there and see what the SSID is for the
service. It may indicate who it belongs to...

If you have LOS to the site and can arrange a high gain directive
antenna (eg yagi/disk) then you might just get connected!

Found an article about Sprint having provided a hotspot near Devine;

http://www.bbwexchange.com/pubs/2007/04/27/page1369-567277.asp

Note that this isn't the open 802.11x variety but their own $ network.

You can also try this search engine but I don't know how accurate the
results are.

http://www.jiwire.com/search-hotspot-locations.htm

Good luck!

Cheers Bob W5/VK2YQA East Texas

kc5cqa wrote:
>
> I hope u can help. I live out in the boonies, and have 'dial
> up', about 5 miles from my qth is a I-35 rest area with 'wireless'.
> I have been told, the 'wireless' extends two or three miles in both
> directions. Where do I post a question about trying to excess this
> wireless service???? thanks in advance. cl73

720. MI5 Persecution: Channel Four TV News - 12/Feb/1999 (5388)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 20:54:47 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072020544491@4ax.com>
Source record: 37033
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Channel Four TV News - 12/Feb/1999

Certainty level: 100%

I am positively, utterly, completely sure this item is about me. It's a bit subtle so the objective reader might not understand my certainty. Here is what happened. I was watching Channel Four News with Jon Snow, on the day Clinton "got off" (as it were) in the Monica-gate scandal. Snow said;

"[and we're anticipating that the President himself will make his] first comments after the trial in which he has now been cleared at around half-past seven. So we'll have more on the historic judgment, we'll also be considering [starts smiling] the winners and losers in this whole sorry saga. Now further doubts have been...."

When Snow said "half-past seven", I looked at the clock on the mantelpiece above the TV. Snow saw my glance, and in reaction to my glance at the clock, smiled. I think he was smiling at what he perceived as my self-importance.

Usually when newscasters or radio presenters laugh at me, there is an excuse for their laughter; usually they manage to find some reason for my being "funny"; their amusement is blamed on me; it is my "fault" they are laughing. And so it was with this instance; Jon Snow thought it was funny that I should be so interested in seeing Clinton, and his half-smile while reading the words "winners and losers" expresses that.

I wrote to Snow at ITN shortly after this broadcast to ask him about his behaviour; of course, he didn't reply.

5388

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
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721. Re: where do I look for this info???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 21:02:41 UTC
From: FUBAR <FUBAR@anonymous.fi>
Message-ID: <facvdqfiq1@aioe.org>
Source record: 37034

if its open/unsecured, then not too much of a problem.

you will need a high gain yagi type antenna pointed at the site in question
and you *will* need some microwave low loss coax cable to feed it to a
wireless network device on your machine. That cable will probably be the
most expensive part of yoursetup..

one way to overcome loss in the cable would be to use a "wireless range
extender" with removable antennas. you could effectively use it as a line
repeater (mind you, this device isn't cheap either (about $200.00)).

you can google for wireless+internet+range+extender+antenna and see what
pops up.

kc5cqa wrote:

> I hope u can help. I live out in the boonies, and have 'dial
> up', about 5 miles from my qth is a I-35 rest area with 'wireless'.
> I have been told, the 'wireless' extends two or three miles in both
> directions. Where do I post a question about trying to excess this
> wireless service???? thanks in advance. cl73

722. MI5 Persecution: Chris Tarrant - 10/March/1999 (6611)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 21:11:08 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072021110540@4ax.com>
Source record: 37036
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Chris Tarrant - 10/March/1999

Certainty level: 25%

This one might be aimed at me, or it might be tinged with a whiff of intent, although I only give one chance in four for Tarrant's thoughts being aimed
at me when he said this. During his "Who wants to be a Millionaire" TV show in March 1999, he said;

if you're watching the show jumping up and down screaming at the telly,
remember you could be here. You can either seek professional help or call us...

The background is as follows. In early March I'd sent a quantity of emails to Capital FM, the London radio station where Mr Tarrant has his breakfast
show. They were addressed to the email account which Mr Tarrant used to read emails posted on Capital's website. Capital objected to the quantity
of emails - in fact, they contacted the Metropolitan Police's Computer Crime unit, who, in turn, "felt my collar" by giving me a verbal warning
over the phone to cease this behaviour.

The emails contained the words which I had heard Mr Tarrant speak in early 1994, namely;

"You know this bloke? He says we're trying to kill him.
We should be done for attempted manslaughter".

At the time of writing (May 1999), the Police have not told me what aspect of the emails was "illegal", nor despite my repeated urging have they
questioned Mr Tarrant about his remarks from 1994.

Regarding the clip from Tarrant's show above. The Police spoke to me on the afternoon of Wednesday 10 March 1999. Tarrant's live show went out
that same evening. The Police have told me that after speaking to me they told Capital FM that they'd spoken to me regarding the emails. So Tarrant
would have known by the time of the show who'd sent the emails and why.... and it's quite possible that his remarks about "seeking professional help"
were aimed at me personally following my attempts to persuade him to own up to his 1994 remarks.

6611

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723. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 21:38:09 UTC
From: dplatt@radagast.org
Message-ID: <17epp4-gn4.ln1@radagast.org>
Source record: 37037

In article <facosq$72t$1@news.jpl.nasa.gov>,
Jim Lux <james.p.lux@jpl.nasa.gov> wrote:

>I would venture to say that with today's technology, one should be able
>to get within 0.5dB of the Shannon limit without too much trouble. So,
>since a BPLish signal can be many MHz wide, and the putative interfering
>signal is going to be pretty narrow band in comparison, they can code
>around it.

For a relatively weak interfering signal, that's probably true.

That's not likely to be the case in a lot of situations, though. A strong interfering signal - say, a few watts of HF coming from a wire antenna, a few houses away from a BPL receiver - is likely to be strong enough to saturate the RF front-end of the BPL receiver. This will result in a severe "de-sense" problem - it'll wipe out most other signals within the receiver passband.

Ham (and other narrow-band) HF receivers deal with this problem by limiting their receiver passband. Single-band filters prior to the first mixer or first RF amp will keep out interferers outside that one band, and narrow-bandwidth multi-pole filters after the first mixer can reduce the impact of interfers that are closer to the desired signal.

This approach doesn't work with systems which have a "wide-open" broad-bandwidth front end, such as a typical BPL receiver, as the receiver's front end *has* to be left open to the entire bandwidth of the desired incoming signal. Many modern ham HTs have similar problems... their "DC to daylight" front ends are easily desensed, or driven into severe intermodulation by nearby VHF transmitters (e.g. police, fire, paging, and so forth).

I imagine it's possible to reduce the severity of a BPL receiver's desense problems by using a wide-dynamic-range front end... but these take more power and aren't as suitable for large-scale chip integration, and are thus going to be more expensive to build.

Even a "ham-friendly" BPL transceiver, with deep transmitter notching of the ham-band frequencies, is likely to have trouble when it finds several volts of (e.g.) 40-meter RF coming into its input terminals.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

724. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 22:31:38 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns99929DF45DD82doldridgsprintca@64.59.135.159>
Source record: 37038

John Smith I <assemblywizard@gmail.com> wrote in
news:facdeg$d3q$1@news.albasani.net:

> Dave Oldridge wrote:
>
> > ...
>> Lots of times. My CW error-correcting hardware is excellent, is
>> always on, and conveniently located in my head.
>>
>> But you're missing my point. A modem is always an analog device.
>> And if it's listening on a frequency with a loud signal on it, then
>> it can be saturated by that signal. I've not seen many that could
>> copy the heterodyne. Mostly they just stop giving any recovery at
>> all.
>>
>
> There are very rugged modems. Most people just accept the modem which
> was included with their computer. A cheap modem implemented, almost
> totally, in software; these can exhibit poor performance.
>
> You get what you pay for, and like I say, BPL is a developing
> technology; or, in other words, problems must be found before they can
> be fixed. Your KW+ signal will be a great aid, possibly, in that
> direction ...
>
> Having worked in the software/algorithm/data-compression aspects of
> modems, I have experienced high levels of line noise on standard
> modems which needed new techniques to solve ... Although I have seen
> many instances where line noise is at such levels even speech is
> horrible, and data xmission slows to a crawl, there are few instances
> where it becomes absolute zero--baring the physical disconnection of
> the line.
>
> If you are inducing interference of a noticeable level in a persons
> home/business that is noticeable, it will be more than just noticeable
> on the BPL modem!

Not so. Most home and business equipment is not DESIGNED to receive
signals on frequencies where I operate (the single exception being some
cable systems that use the 2m band). Nor is it using wiring that is WIDE
OPEN to my signals. In fact the worst offenders are stereo systems with
parallel speaker leads that need only a bit twisted pair, bypassing and a
ferrite or two to eliminate all the pickup. Shielded wires may also need
toroids to eliminate magnetic pickup that goes right through the shields.

But sending an HF signal down an open power line is not just inviting interference, it's BEGGING for it, since you've given the system a very large antenna and put a sensitive receiver on the end of it. DELIBERATELY. That's like designing a gun with a plugged barrel and then firing it!

--
Dave Oldridge+
ICQ 1800667

725. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 22:36:29 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns99929EC6A46Edoldridgsprintca@64.59.135.159>
Source record: 37039

John Smith I <assemblywizard@gmail.com> wrote in
news:facdgu$d3q$2@news.albasani.net:

> Dave Oldridge wrote:
>> John Smith I <assemblywizard@gmail.com> wrote in
>> news:fa8p0n$d5s$1@news.albasani.net:
>>
>>> Dave Oldridge wrote:
>>>> John Smith I <assemblywizard@gmail.com> wrote in news:fa4i2ajve1
>>>> @news.albasani.net:
>>>>
>>>>> Dave Oldridge wrote:
>>>>>
>>>>>> ...
>>>>> You need a good book on digital error correction algorithms in
>>>>> digital communications.
>>>>>
>>>>> Unless you have constructed a real rf jammer (white noise really),
>>>>> BPL will eat up any legitimate amateur communications you can
>>>>> throw at it ... however, rumors do prevail, like the one about the
>>>>> tin foil hat.
>>>> So how is it gonna eat up having its receiver saturated? I'm pretty
>>>> familiar with digital comms and, with the exception of some pretty
>>>> slow speed stuff designed for weak signal work, most of it is not
>>>> very good unless you have a really solid signal-to-noise ratio.
>>>> I'm just saying that if it's getting out to my antenna that loud,
>>>> then my kilowatt is gonna have a fair chance at saturating the
>>>> thing's receiver. And the more noise they make, the more I'm apt
>>>> to have to use the kilowatt to shout over them.
>>>>
>>>> Of course in our current enforcement situation here, I'd probably
>>>> simply be told to stand down and have to go to great legal lengths
>>>> to appeal the ruling.
>>>>
>>> Digital is not analog, when adverse conditions have made an analog
>>> signal totally unusable, a digital signal, most likely, may still be
>>> achieving 100% error free data transfer--it is just the nature of
>>> the beast.
>>
>> Actually, I've found that, except for very slow data rate stuff,
>> digital signals require a BETTER signal-to-noise than analog to be
>> readable. And there is no partial readability with most of the
>> commercially-used digital modes. That is to say you either have
>> error-free transmission or none whatever.

>>
>>> The "intelligence" of the software controlling the data
>>> transmission(s) is the single most important factor--as logic would
>>> dictate. Even under almost total saturation (it would be virtually
>>> impossible for 100% saturation, baring hooking the kw+ rig directly
>>> to the power lines) of the BPL signal some type of heterodyne would
>>> be occurring with the KW signal. Since digital is simply detecting
>>> an ON/OFF signal, in conjunction with spacing/length of these, an
>>> on/off signal is still detectable in this heterodyne--given the
>>> software is aware and capable of reading this signal and switching
>>> "modes" to do so, no harm is done to the data ... and without doubt,
>>> new error correction methods will also develop as BPL grows and
>>> hf-rf-terrorist-hams challenge this system ... <LOL!>
>>
>> You cannot recover data with a modem whose input transistor is biased
>> off by rectified RF. I know this. I've tried it.
>>
>>> Digital is magnitudes more robust than analog, again owing to the
>>> very nature of the beast and the simplicity of the on/off, pulse
>>> width, timing nature of the signal.
>>
>> The only real advantage digital has is its error-correction
>> algorithms. Those can do very good work when they actually have
>> enough data to work with. But once the data recovery by the the very
>> ANALOG device that is receiving the signals drops below their
>> threshold, then the recovery becomes terrible. Some modems are
>> better than others. My old Telebit 19.2K could suck 1200 baud
>> recovery out of a phone line you couldn't talk on. But give it a
>> couple of volts of RF in the mix and it would drop stone cold dead.
>> And BPL has the "disadvantage" of not being able to filter our
>> frequencies AND use them at the same time. At worst, I'd drive the
>> BPL machinery to other parts of the band from where I was working....
>>
>>
>
> Obviously, we have NOT seen the same equip/software/algorithms and
> successes ... dream on ...

Algorithms will only help you by slowing down and using redundancy or by being frequency agile and thereby clearng off my frequency. And NO equipment DESIGNED to be a sensitive receiver at the frequencies you want to use will be immune to even stronger signals picked up by the open ANTENNA that you're using for a "transmission cable."

Dream on.

Look, I don't want to tell you how to engineer. But you've obviously got your mind made up and the facts and experience of others be damned.

--
Dave Oldridge+

ICQ 1800667

726. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 22:48:19 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9993598CF2068nonenowhere@61.9.191.5>
Source record: 37040

Owen Duffy <none@no.where> wrote in
news:Xns9992AAE5D621Bnonenowhere@61.9.191.5:

> PS: The quoted output from TLLC is somewhat hard to read due to the
> Greek characters and some other symbols not copying to plain text.

I have added a 'No symbols in output' checkbox to the TLLC input form to
allow selection of a more ASCII friendly output format.

Using that switch on Scotts problem yields:

RF Transmission Line Loss Calculator / Enhanced
Parameters
Transmission Line Belden 9204 (RG-59/U)
Code B9204
Data source Belden
Frequency 3.800 MHz
Length 0.250 wavelengths
Zload 54.00+j0.00 ohms
Yload 0.018519+j0.000000 ohms
Results
Zo 75.01-j1.45 ohms
Velocity Factor 0.660
Length 90.00 deg, 0.250 wl, 13.024 m
Line Loss (matched) 0.269 dB
Line Loss 0.279 dB
Efficiency 93.77%
Zin 102.10-j3.81 ohms
Yin 0.009780+j0.000365 ohms
Gamma, rho<theta, RL, VSWR (source end) 1.53e-1-j8.82e-3, 0.153<-3.3
deg, 16.3dB, 1.36
Gamma, rho<theta, RL, VSWR (load end) -1.63e-1+j9.38e-3, 0.163<176.7
deg, 15.7dB, 1.39
gamma 1.24e-1+j6.28e+0
k1, k2 5.46e-4, 3.06e-9
Loss model source data frequency range 10.000 MHz - 1000.000 MHz
Correlation coefficient (r) 0.999661

727. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-20 23:05:05 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fad6n1$9tv$1@news.albasani.net>
Source record: 37041

Dave Oldridge wrote:

> ...

This thread is beginning to switch gears, now we seem to be on the subject of jamming; jamming is obviously possible. A simple 100 MW white noise generator driving my KW+ lab amp would tear up a good chunk of my neighborhood, given the right ant/circumstances. Heck, I would probably even be placing enough of a signal on the phone lines to slow up 56K dialup modems also.

Somehow, I just wouldn't get anything out of it. And, given the few active hams in the US, the logic of logistics says, "moot point."

But, for those egos imagining themselves special, deserving and empowered above mere mortals--they are allowed to dream. <ROFLOL!>

However, it appears the world according to you will end up with laws/rules/regulations being passed to halt amateurs jamming of citizens use of the internet. With as much damage as some amateurs have done to the hobby and image of amateurs in general--I guess it won't matter too much.

Regards,
JS

728. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 00:03:10 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fada3u$j72$1@news.jpl.nasa.gov>
Source record: 37047

Dave Platt wrote:
> In article <facosq$72t$1@news.jpl.nasa.gov>,
> Jim Lux <james.p.lux@jpl.nasa.gov> wrote:
>
>
>>I would venture to say that with today's technology, one should be able
>>to get within 0.5dB of the Shannon limit without too much trouble. So,
>>since a BPLish signal can be many MHz wide, and the putative interfering
>>signal is going to be pretty narrow band in comparison, they can code
>>around it.
>
>
> For a relatively weak interfering signal, that's probably true.
>
> That's not likely to be the case in a lot of situations, though. A
> strong interfering signal - say, a few watts of HF coming from a wire
> antenna, a few houses away from a BPL receiver - is likely to be
> strong enough to saturate the RF front-end of the BPL receiver. This
> will result in a severe "de-sense" problem - it'll wipe out most other
> signals within the receiver passband.
>
> Ham (and other narrow-band) HF receivers deal with this problem by
> limiting their receiver passband. Single-band filters prior to the
> first mixer or first RF amp will keep out interferers outside that one
> band, and narrow-bandwidth multi-pole filters after the first mixer
> can reduce the impact of interfers that are closer to the desired
> signal.
>
> This approach doesn't work with systems which have a "wide-open"
> broad-bandwidth front end, such as a typical BPL receiver, as the
> receiver's front end *has* to be left open to the entire bandwidth of
> the desired incoming signal. Many modern ham HTs have similar
> problems... their "DC to daylight" front ends are easily desensed, or
> driven into severe intermodulation by nearby VHF transmitters (e.g.
> police, fire, paging, and so forth).
>
> I imagine it's possible to reduce the severity of a BPL receiver's
> desense problems by using a wide-dynamic-range front end... but these
> take more power and aren't as suitable for large-scale chip
> integration, and are thus going to be more expensive to build.

You can do pretty well these days.. Consider if you're using a direct conversion receiver using a mux driven by quadrature clocks into a low pass filter like the SDR1000.. it has fairly good out of band strong

signal rejection. Granted, in band, the performance is limited by the following audio stages.

There's also a variety of receiver designs intended for GPS in a strong signal environment that avoid desensing, while still retaining wideband receive for the desired signal.

One can also do adaptive analog cancellation.

I would imagine that first (and second) generation clunky BPL receivers would have all sort of problems, but the wide open receiver with strong interferer problem is such a prevalent one, they'll have to come up with a solution that fits in their price bracket.

(or, they won't, because they don't really need BPL to actually work.. They just have to keep the BPL industry alive, and speculative future performance might be enough for that...)

729. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 00:19:28 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13ckbsjvqifg42@corp.supernews.com>
Source record: 37042

Tam/WB2TT wrote:
>>
> If you are going to buy new coax, might as well get something decent. I used
> RG11 FOAM for a 1/4 wave transformer at 3.8 MHz, and it worked per theory.

I think you were lucky. I've found that the velocity factor and characteristic impedance of foam dielectric coax, even quality coax, to vary a lot more than solid dielectric cable. Apparently they don't have very good control over the foam density.

Roy Lewallen, W7EL

730. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 00:25:13 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fadbdc$l8j$1@news.albasani.net>
Source record: 37043

Dave Oldridge wrote:
> ...

http://pr-gb.com/index.php?option=com_content&task=view&id=11281&Itemid=9

http://www.bpltoday.com/public/1212.cfm?affID=prgb1

Regards,
JS

731. Off-center fed dipole, questions

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 00:29:34 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.21.00.29.33.465109@from.qrz.com>
Source record: 37044

On page 7-10 of the 20th edition of the ARRL Antenna Book is a description of an off-center fed dipole. I have the necessary materials around here so I thought I'd experiment with that a bit and see how it does.

I'm a little confused about the balun.

I don't have a 4:1 or 6:1 current balun, but I do have a 4:1 W2AU-type balun and an MFJ-915 RF Isolator, what they call a "1:1 current balun" (actually an unun). I figured on connecting the latter to the former with a double male PL-259 adapter and then connecting the coax to the other end of the unun ... rather heavy, and no way to support it at the balun, and it'll no doubt droop like a 400-pound beer belly, but I guess I'll jump off of that bridge when I come to it...

The instruction sheet for the MFJ-915 says I should put the unun in the line at the transmitter end, and yet the discussion of the OCF dipole in the Antenna Book shows the 4:1 current balun at the antenna and a length of coax to the transmitter.

So, should I connect the unun to the balun as I have it, or should I connect it at the transmitter end as MFJ advises?

It does seem that if the objective is to keep RF off the outside of the coax, the unun really should go up at the antenna end.

What say you?

732. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 00:30:29 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <fadbn8$l8j$2@news.albasani.net>
Source record: 37045

Dave Oldridge wrote:

> ...
> Algorithms will only help you by slowing down and using redundancy or by
> being frequency agile and thereby clearng off my frequency. And NO
> equipment DESIGNED to be a sensitive receiver at the frequencies you want
> to use will be immune to even stronger signals picked up by the open
> ANTENNA that you're using for a "transmission cable."
>
> Dream on.
>
> Look, I don't want to tell you how to engineer. But you've obviously got
> your mind made up and the facts and experience of others be damned.

My son, in florida, contracts to supply firmware for these modems ...
advise all you wish; I will continue to make your posts available to
him. <grin>

Regards,
JS

733. Re: Off-center fed dipole, questions

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 00:51:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <17dkc3p5vaij8kdn8tg2v26imnaihe9shm@4ax.com>
Source record: 37046

On Mon, 20 Aug 2007 20:29:34 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>So, should I connect the unun to the balun as I have it, or should I
>connect it at the transmitter end as MFJ advises?

Hi Rick,

Yes.

So much for the short answer. With an OCF, your line is so heavily invested with a lack of symmetry that it will ring in the fields surrounding the antenna. Hence it needs to be choked every quarter wave away from the feedpoint (that is, the UnUn at the bottom of the BalUn AND again in intervals of a quarterwave).

Now as the need for suppressing Common Mode currents (which are due both to the off center feed AND the asymmetry). Unless you are feeling the pain of a live chassis, or suffering from inappropriate foldback of the transmitter (due to its circuits being confounded by Common Mode currents); then you could live with it. Then, of course, there is the perfectionist's point of view that this adds a vertical radiator to an otherwise dipole design. Yes it does. How much it contributes to the mix of fields is going to be a spin of the wheel (just as how much CM is there going to be on the line?).

One last point. The OCF resonates at pretty much the same frequencies as it would as a dipole, it is only the feedpoint Z that changes with respect to placement. Some places are great for many bands, others are abysmal, and some bring in bands that would be a nasty match for the strictly balanced dipole. If you don't snub the feedline, you are adding other opportunistic resonance's to the mix.

73's
Richard Clark, KB7QHC

734. Re: Off-center fed dipole, questions

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 01:21:02 UTC
From: dplatt@radagast.org
Message-ID: <u8rpp4-nd2.ln1@radagast.org>
Source record: 37048

In article <pan.2007.08.21.00.29.33.465109@from.qrz.com>,
Rick (W-A-one-R-K-T) <get.my.email@from.qrz.com> wrote:

>On page 7-10 of the 20th edition of the ARRL Antenna Book is a description
>of an off-center fed dipole. I have the necessary materials around here
>so I thought I'd experiment with that a bit and see how it does.
>
>I'm a little confused about the balun.
>
>I don't have a 4:1 or 6:1 current balun, but I do have a 4:1 W2AU-type
>balun and an MFJ-915 RF Isolator, what they call a "1:1 current balun"
>(actually an unun). I figured on connecting the latter to the former with
>a double male PL-259 adapter and then connecting the coax to the other end
>of the unun ... rather heavy, and no way to support it at the balun, and
>it'll no doubt droop like a 400-pound beer belly, but I guess I'll jump
>off of that bridge when I come to it...
>
>The instruction sheet for the MFJ-915 says I should put the unun in the
>line at the transmitter end, and yet the discussion of the OCF dipole in
>the Antenna Book shows the 4:1 current balun at the antenna and a length
>of coax to the transmitter.
>
>So, should I connect the unun to the balun as I have it, or should I
>connect it at the transmitter end as MFJ advises?
>
>It does seem that if the objective is to keep RF off the outside of the
>coax, the unun really should go up at the antenna end.
>
>What say you?

Based on the experience of a few of my ARES/RACES cohorts with their
OCF dipoles, I'd say that "it depends".

Putting the unun/isolator up at the antenna will tend to block
conduction of RF down onto the feedline from the radiator.

However, because the feedline is not located symmetrically with
respect to the radiator, there will be some amount of RF induced onto
the outside of the feedline by the (unequal) RF fields from the two
sides of the radiator. This will allow some amount of RF current flow
on the feedline, and (depending on your shack grounding arrangements)
might possibly allow for some amount of "RF on the case", RF feedback
into the audio chain, and similar annoyances.

If you put the isolator down at the transmitter, you may have more RF
flowing on the outside of the feedline (as it can be induced as above,

and can also flow down via conduction) but the isolator/unun will present a high impedance to this current flow and keep it away from the rig.

Due to the differences in the feedline RF current flow, you may find that the SWR as seen at the rig is better in one configuration than in the other. Which arrangement gives the better match is likely to depend on the length of the feedline, height of the antenna, proximity of the antenna to buildings and trees, and so forth.

In our Field Day use of a Buckmaster 130' OCF, the guy doing the setup ended up with the isolator located near the rig... he got a better match to 50 ohms that way, and preferred to keep the induced RF away from the rig, PCs, sound-card interfaces, and so forth.

I'd suggest that you try it both ways, and use whichever way that you find you prefer.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

735. Antique 1912-1949 Porcelain teapot 528 chinaware 400 Website invitation visit

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 02:06:19 UTC
From: xjx588 <xjx_588@126.com>
Message-ID: <1187661979.277996.203830@q3g2000prf.googlegroups.com>
Source record: 37049

Antique 1912-1949 Porcelain teapot 528 chinaware 400 Website
invitation visit
Website http://www.xjx588.com
http://www.xjx588.com/more.asp?name=xjx588&id=14
E-mail xjx_588@tom.com
xjx_588@126.com
City Shengzhou Zhejiang China
Thanks !
Jianxiong Xu

736. Re: where do I look for this info???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 03:40:33 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <R8tyi.9213$A57.3819@trnddc04>
Source record: 37050

"kc5cqa" <lorentsonci@lycos.com> wrote in message
news:46c996dc.1018076@news.devtex.net...
> I hope u can help. I live out in the boonies, and have 'dial
> up', about 5 miles from my qth is a I-35 rest area with 'wireless'.
> I have been told, the 'wireless' extends two or three miles in both
> directions. Where do I post a question about trying to excess this
> wireless service???? thanks in advance. cl73

Hi Charles

Five miles is a long way for a WiFi link up. My suggestion is for you to
not spend any money on this "link up" till you are sure the parts you buy
will produce a good connection to the 'wireless' site.
If this was my project, I'd be looking for a 10 foot satellite TV dish
that I could mount to look at the wireless site which will be line of sight,
of course.
I am pretty sure that, if you do get your system to work, you will have a
wireless Bridge at the antenna so it connects to your computer via CAT 5
cable, not coax.

Jerry

737. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 04:35:16 UTC
From: "n3ox.dan@gmail.com" <n3ox.dan@gmail.com>
Message-ID: <1187670916.958801.291930@k79g2000hse.googlegroups.com>
Source record: 37051

>I use RG6 quite a bit for ham work, and the cable I buy uses a HDC >centre
>conductor. I would avoid CCS for lower HF.

For what it's worth, I looked up the specs on the Carol C5785 that is
locally available at Home Depot here in the States. It's quad-shield
RG-6 and they list the losses down to 1MHz

1MHz .26dB/100ft
10MHz .81dB/100ft
50MHz 1.46dB/100ft

According to your calculator for RG-6/U it should be
.19
.6
1.37

As a percentage difference in dB (boy that's a bad unit) it's actually
a good bit more loss at 1 and 10MHz, but in a practical sense it's
probably pretty negligible.

So unless you're going 1000 feet to transmitting antennas on mid to
low HF, I doubt it's a worry. I don't know what the price
differential is between CCS and hard drawn but i do know that cable
with about the same loss as RG-213 that costs 12 cents a foot is
pretty attractive.

As far as the original post, I picked my stuff up and made a bunch of
twelfth-wave transformers for it and that seemed to work out fine, but
I guess they're less sensitive if you put one at each end because they
would tend to match to whatever cable you're making the transformers
out of and they're very broadband too.

As far as velocity factor goes, I measured mine before I started
cutting (I built XFMRS for 2m and 70cm so I had to be sort of
accurate. It worked).

73,
Dan

738. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 05:15:50 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99939B3FA7Enonenowhere@61.9.191.5>
Source record: 37052

"n3ox.dan@gmail.com" <n3ox.dan@gmail.com> wrote in
news:1187670916.958801.291930@k79g2000hse.googlegroups.com:

>>I use RG6 quite a bit for ham work, and the cable I buy uses a HDC
>>>centre conductor. I would avoid CCS for lower HF.
>
> For what it's worth, I looked up the specs on the Carol C5785 that is
> locally available at Home Depot here in the States. It's quad-shield
> RG-6 and they list the losses down to 1MHz
>
> 1MHz .26dB/100ft
> 10MHz .81dB/100ft
> 50MHz 1.46dB/100ft
>
> According to your calculator for RG-6/U it should be
> .19
> .6
> 1.37
>

Dan, You didn't say which of the RG6 cables you used. The figures you quote are very similar to Belden 1189A. In respect of 1189A, note that the regression model is based on data points from 55MHz to 1000MHz. That is either because that is what Belden supplied, or it could be that I excised some low frequency data points that were a bad fit to the model.

Beware of results where the estimate is an extrapolation. (The frequency range is red when the estimate is an extraplation.)

Owen

739. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 08:51:24 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1m8x85w9rn.fsf@persaunet.uninett.no>
Source record: 37053

Michael Coslo <mjc5@psu.edu> writes:

> Owen Duffy wrote:
> Good grief. The answer is to power them with DC, and tell 'em
> that it will serve as a magnet, thereby allowing magnetism's great
> healing properties. Could sell little boxes with diodes in them. Maybe
> a crystal or two for harmonic hegemony and celestial peace too.... ;^)

And do remember that a ham antanna doesn't 'radiate'. It 'emanates
energies'.

73
LA4RT Jon

740. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 10:03:11 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9993CBF802755nonenowhere@61.9.191.5>
Source record: 37054

Jon =?utf-8?Q?K=C3=A5re?= Hellan <dev@null.com> wrote in
news:1m8x85w9rn.fsf@persaunet.uninett.no:

> Michael Coslo <mjc5@psu.edu> writes:
>
>> Owen Duffy wrote:
>> Good grief. The answer is to power them with DC, and tell 'em
>> that it will serve as a magnet, thereby allowing magnetism's great
>> healing properties. Could sell little boxes with diodes in them. Maybe
>> a crystal or two for harmonic hegemony and celestial peace too.... ;^)
>
> And do remember that a ham antanna doesn't 'radiate'. It 'emanates
> energies'.
>
> 73
> LA4RT Jon

LA4RT Jon,

I wrote no such thing, you have misquoted, you are a fraud.

Owen

741. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 11:21:07 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1m4pitw2u4.fsf@persaunet.uninett.no>
Source record: 37055

Owen Duffy <none@no.where> writes:

> Jon =?utf-8?Q?K=C3=A5re?= Hellan <dev@null.com> wrote in
> news:1m8x85w9rn.fsf@persaunet.uninett.no:
>
>> Michael Coslo <mjc5@psu.edu> writes:
>>
>>> Owen Duffy wrote:
>>> Good grief. The answer is to power them with DC, and tell 'em
>>> that it will serve as a magnet, thereby allowing magnetism's great
>>> healing properties. Could sell little boxes with diodes in them. Maybe
>>> a crystal or two for harmonic hegemony and celestial peace too.... ;^)
>>
>> And do remember that a ham antanna doesn't 'radiate'. It 'emanates
>> energies'.
>>
>> 73
>> LA4RT Jon
>
> LA4RT Jon,
>
> I wrote no such thing, you have misquoted, you are a fraud.
>
> Owen

Sorry. I didn't notice that I cut everything you wrote, but left your
name in.

Jon

742. Re: where do I look for this info???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 11:35:27 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <09vqp4-h48.ln1@p400bob.personal.cox.net>
Source record: 37056

A cheap solution for the cable loss issue is to buy a USB wireless device and then run whatever length of "lower frequency" cable to that. I have even seen articles with these devices stuck inside parabolic and corner reflectors. About USD40-USD50 new from memory. (for just the USB device)

You can of course also mount a wireless bridge up on the tower and run CAT5 to it...

Cheers Bob VK2YQA

FUBAR wrote:
> you will need a high gain yagi type antenna pointed at the site in question
> and you *will* need some microwave low loss coax cable to feed it to a

743. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 13:53:26 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <g8CdnXcc_Mvac1fbnZ2dnUVZ_tSknZ2d@comcast.com>
Source record: 37057

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:13ckbsjvqifg42@corp.supernews.com...
> Tam/WB2TT wrote:
>>>
>> If you are going to buy new coax, might as well get something decent. I
>> used RG11 FOAM for a 1/4 wave transformer at 3.8 MHz, and it worked per
>> theory.
>
> I think you were lucky. I've found that the velocity factor and
> characteristic impedance of foam dielectric coax, even quality coax, to
> vary a lot more than solid dielectric cable. Apparently they don't have
> very good control over the foam density.
>
> Roy Lewallen, W7EL

I didn't have the exact Vp number for the SIW cable; so, I trimmed it. Length came out reasonable, though. If I measure a 50 Ohm load through the cable, my MFJ269 reads 102/J0 at resonance. A little on the low side, but probably within tolerance. If it was not raining outside, I would measure the cable to see what exact length I ended up with. Bottom line is that my (late) 75 m loop did have an SWR of 1.1:1 at resonance.

Tam/WB2TT

744. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 13:58:27 UTC
From: mcclements@gmail.com
Message-ID: <1187704707.009733.273750@r34g2000hsd.googlegroups.com>
Source record: 37058

The RG-59/U I am using does in fact have a stranded center conductor.
I am using RG-59/U because I am feeding a vertical (quad) loop on the
vertical side and I am running the coax away at a 90 degree angle. The
lighter/smaller coax is more suited for this arrangement. I didn't
use RG6 (which I actually have) because the reducers for the PL259
and ferrite beads I have don't fit this size coax. I figure for 3.8Mhz
that loss wasn't such a big issue...in addition to the 1/4WL section
of 75 ohm coax is only another 25 feet of 50 Ohm coax to the shack.

-Scott, WU2X

On Aug 21, 1:15 am, Owen Duffy <n...@no.where> wrote:
> "n3ox....@gmail.com" <n3ox....@gmail.com> wrote
innews:1187670916.958801.291930@k79g2000hse.googlegroups.com:
>
>
>
> >>I use RG6 quite a bit for ham work, and the cable I buy uses a HDC
> >>>centre conductor. I would avoid CCS for lower HF.
>
> > For what it's worth, I looked up the specs on the Carol C5785 that is
> > locally available at Home Depot here in the States. It's quad-shield
> > RG-6 and they list the losses down to 1MHz
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> > 1MHz .26dB/100ft
> > 10MHz .81dB/100ft
> > 50MHz 1.46dB/100ft
>
> > According to your calculator for RG-6/U it should be
> > .19
> > .6
> > 1.37
>
> Dan, You didn't say which of the RG6 cables you used. The figures you
> quote are very similar to Belden 1189A. In respect of 1189A, note that
> the regression model is based on data points from 55MHz to 1000MHz. That
> is either because that is what Belden supplied, or it could be that I
> excised some low frequency data points that were a bad fit to the model.
>
> Beware of results where the estimate is an extrapolation. (The frequency
> range is red when the estimate is an extraplation.)
>
> Owen

745. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 14:14:34 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <faes0i$tq4$1@f04n12.cac.psu.edu>
Source record: 37059

Dave Oldridge wrote:

> Algorithms will only help you by slowing down and using redundancy or by
> being frequency agile and thereby clearng off my frequency. And NO
> equipment DESIGNED to be a sensitive receiver at the frequencies you want
> to use will be immune to even stronger signals picked up by the open
> ANTENNA that you're using for a "transmission cable."

Good point, Dave. Any error correction comes with the expense of time, and of course slows down the transmission of the data. The packet doesn't jibe, so it is asked for again, and again, and so on. Better be a heck of a algorithim when the interfering signal is really strong as to swamp the modem's reciever.

There are plenty of examples to the contrary of the digital signal as robust entity. Experiments have been made in which a 5 watt signal in a car with a mobile antenna will knock out nearby BPL signals. 100 watts in a car will do even more damage, and a base station yet more. Other experiments have shown the so called notches being abandoned after the system was unable to send good packets. Kind of like it was getting desperate almost.

Seeing as how qrp levels into inefficient antennas can cause problems, I have to wonder what will happen during the next sunspot max.

The whole BPL affair makes me kind of wonder why shielding was invented.

And for what? a DSL speed "broadband" digital signal? BPL is a poor solution to the problems of ten years ago. It is the 8-track of broadband access.

- 73 de Mike KB3EIA -

746. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 14:45:40 UTC
From: John Smith I <assemblywizard@gmail.com>
Message-ID: <faetqpufl1@news.albasani.net>
Source record: 37060

John Smith I wrote:
> http://www.redherring.com/Home/22562
>
> JS

THIS:

"There is a fourth technology rearing its head, one that uses ordinary
power lines to deliver high speed internet. Down in Texas, Broadband
over Powerline (BPL) will be delivered to close to two million people in
the Dallasï¿½Fort Worth area, beginning at the end of this year.

This technology, which obviously utilizes power lines, is said to be
faster than cable or DSL systems, and has matching upload and download
speeds (in some systems the upload speed is slower than the download).
Apparently, installation fees are minimal, since the system works via a
modem plugged into any electrical outlet.

There's always a hitch, however. The power system seems to need to be of
a smart grid type, which is two-way in that it collects data while
transmitting power. Whether that is even feasible in Nova Scotia remains
to be seen.

In any case, the wireless system used in North Queens seemed, to me, to
be fast and reliable. With large company like EastLink set to assume the
service, former and future broadband customers in the area will be able
to sign on with confidence."

FROM
HERE:http://www.novanewsnow.com/article-130788-Similar-excitement-77-years-later.html

Regards,
JS

747. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 18:48:23 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fafc1n$4ie$1@news.jpl.nasa.gov>
Source record: 37064

Michael Coslo wrote:
> Dave Oldridge wrote:
>
>> Algorithms will only help you by slowing down and using redundancy or
>> by being frequency agile and thereby clearng off my frequency. And NO
>> equipment DESIGNED to be a sensitive receiver at the frequencies you
>> want to use will be immune to even stronger signals picked up by the
>> open ANTENNA that you're using for a "transmission cable."
>
>
>
> Good point, Dave. Any error correction comes with the expense of
> time, and of course slows down the transmission of the data. The packet
> doesn't jibe, so it is asked for again, and again, and so on. Better be
> a heck of a algorithim when the interfering signal is really strong as
> to swamp the modem's reciever.

This is only true if you're doing a ARQ type protocol. If you're expecting interference (and BPL certainly is), a Forward Error Correction type strategy would be a much better bet. For instance, ECC memory uses a rate 8/11 code (3 syndrome bits for 8 databits) to correct any single bit error and detect double bit errors. For BPL, one would probably choose some form of multiple carrier encoding (since interferers are likely to be narrow band) with some form of interleaving (since interferers are bursty), and a fairly robust code.

The whole art and engineering of communication link design comes from selecting that tradeoff between redundancy and reliability. Do you send twice as many bits, twice as fast, to get an overall lower data rate (e.g. a rate 1/2 code).

>
> There are plenty of examples to the contrary of the digital signal
> as robust entity. Experiments have been made in which a 5 watt signal in
> a car with a mobile antenna will knock out nearby BPL signals. 100 watts
> in a car will do even more damage, and a base station yet more. Other
> experiments have shown the so called notches being abandoned after the
> system was unable to send good packets. Kind of like it was getting
> desperate almost.

But this is merely an example of a specific bad implementation of BPL. There's no physics reason why one couldn't make it work (whether it's cost effective is another story).

>
> Seeing as how qrp levels into inefficient antennas can cause

> problems, I have to wonder what will happen during the next sunspot max.

The signal level received via ionospheric paths are so low, that the BPL receiver isn't going to have any trouble regardless of how good propagation is. OTOH, the interference radiated by BPL will spread that much wider.

>
> The whole BPL affair makes me kind of wonder why shielding was
> invented.
>
> And for what? a DSL speed "broadband" digital signal? BPL is a poor
> solution to the problems of ten years ago. It is the 8-track of
> broadband access.

But it if it provides access to capital markets for the relatively small number of people working in the BPL industry, so they can get paid their salaries and bonuses, then it's a good thing for them.

It doesn't actually have to *work* to succesfully employ hundreds of people and get dozens of people a big bonus. Sure, eventually, it will fall by the wayside and be abandoned, and all those BPL toilers will go on to a new technology or job. I'm sure there were folks who made a lot of money on Betamax cassette design and manufacturing too. (or 8 tracks, for that matter)

(Oddly, the wayside is about the only place BPL would work.. think of telemetering data from trains)
>
>
> - 73 de Mike KB3EIA -

748. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 19:07:51 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns99937B6753F75doldridgsprintca@64.59.135.159>
Source record: 37061

John Smith I <assemblywizard@gmail.com> wrote in news:fad6n1$9tv$1
@news.albasani.net:

> Dave Oldridge wrote:
>
> > ...
>
> This thread is beginning to switch gears, now we seem to be on the
> subject of jamming; jamming is obviously possible. A simple 100 MW
> white noise generator driving my KW+ lab amp would tear up a good chunk
> of my neighborhood, given the right ant/circumstances. Heck, I would
> probably even be placing enough of a signal on the phone lines to slow
> up 56K dialup modems also.
>
> Somehow, I just wouldn't get anything out of it. And, given the few
> active hams in the US, the logic of logistics says, "moot point."
>
> But, for those egos imagining themselves special, deserving and
> empowered above mere mortals--they are allowed to dream. <ROFLOL!>
>
> However, it appears the world according to you will end up with
> laws/rules/regulations being passed to halt amateurs jamming of
citizens
> use of the internet. With as much damage as some amateurs have done to
> the hobby and image of amateurs in general--I guess it won't matter too
> much.

I'm just saying, given human nature and the regulations we are under, the
amateur community will be forced by the rising noise levels to resort to
higher power levels than before. I mean right now, I can get into my
nets with 25 watts and an 8-foot antenna on 80m. Put broad-band
powerline noise in the receivers of the net control stations and I'm
going to have to up the power and possibly use a more efficient antenna
to accomplish that. This is a recipe for interference, not just with BPL
but with any sensitive equipment that happens to do square-law AM
detection.

And yes, you're probably right about the politics. Who cares about
tradition or reason these days. It's all about money and me-me-me-me-me.

--
Dave Oldridge+
ICQ 1800667

749. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 19:12:07 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns99937C2058EFDdoldridgsprintca@64.59.135.159>
Source record: 37062

John Smith I <assemblywizard@gmail.com> wrote in news:fadbdc$l8j$1
@news.albasani.net:

> Dave Oldridge wrote:
> > ...
>
> http://pr-gb.com/index.php?option=com_content&task=view&id=11281&Itemid=9
>
> http://www.bpltoday.com/public/1212.cfm?affID=prgb1

Crass, opportunistic crap propaganda. There is also a very stable network
in place called the telephone system which is ALREADY delivering high speed
internet to a great many homes.

This is just a $$ grab by certain factions trying to shoehorn an internet
market share in an industry they did nothing to create.

Sorry, I'm not impressed by such blathering. But I imagine a lot of naive
politicians are and the current political thinking in both our countries
seems to be to the effect that it doesn't matter HOW someone makes their
dollars as long as they make them.

--
Dave Oldridge+
ICQ 1800667

750. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 19:13:23 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns99937C57EDFE5doldridgsprintca@64.59.135.159>
Source record: 37063

John Smith I <assemblywizard@gmail.com> wrote in
news:fadbn8$l8j$2@news.albasani.net:

> Dave Oldridge wrote:
>
> > ...
>> Algorithms will only help you by slowing down and using redundancy or
>> by being frequency agile and thereby clearng off my frequency. And
>> NO equipment DESIGNED to be a sensitive receiver at the frequencies
>> you want to use will be immune to even stronger signals picked up by
>> the open ANTENNA that you're using for a "transmission cable."
>>
>> Dream on.
>>
>> Look, I don't want to tell you how to engineer. But you've obviously
>> got your mind made up and the facts and experience of others be
>> damned.
>
>
> My son, in florida, contracts to supply firmware for these modems ...
> advise all you wish; I will continue to make your posts available to
> him. <grin>

Ahh, well, when he contracs to supply firmware that automatically gets
the signal out of my way, then maybe he'll earn his money!

--
Dave Oldridge+
ICQ 1800667

751. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 19:46:20 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <giHyi.528$JD.44@newssvr21.news.prodigy.net>
Source record: 37065

Dave Oldridge wrote:
> There is also a very stable network
> in place called the telephone system which is ALREADY delivering high speed
> internet to a great many homes.

For performance/price, it's certainly hard to beat
AT&T's DSL (available for $10 a month in some places)
Here at my new QTH, DSL is $15 per month compared to
Suddenlink's $40 per month over TV cable. If AT&T
isn't careful, they are going to create another
monopoly to be broken up by the Democrats. :-)
--
73, Cecil http://www.w5dxp.com

752. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 19:48:41 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <faffu9$1ub$1@news.service.uci.edu>
Source record: 37066

Jon Kï¿½re Hellan wrote:

> And do remember that a ham antanna doesn't 'radiate'. It 'emanates
> energies'.
>
> 73
> LA4RT Jon

Yes, absolutely. And hopefully it is a device from which positive
vibrational energies might emanate. (unlike some computer keyboards) :-)

73, ac6xg

753. Re: How much can the impedance of coax vary from its characteristic impedance?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 20:12:50 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <LeGdnWvBUtKv2lbbnZ2dnUVZ_uuqnZ2d@comcast.com>
Source record: 37067

<mcclements@gmail.com> wrote in message
news:1187704707.009733.273750@r34g2000hsd.googlegroups.com...
> The RG-59/U I am using does in fact have a stranded center conductor.
> I am using RG-59/U because I am feeding a vertical (quad) loop on the
> vertical side and I am running the coax away at a 90 degree angle. The
> lighter/smaller coax is more suited for this arrangement. I didn't
> use RG6 (which I actually have) because the reducers for the PL259
> and ferrite beads I have don't fit this size coax. I figure for 3.8Mhz
> that loss wasn't such a big issue...in addition to the 1/4WL section
> of 75 ohm coax is only another 25 feet of 50 Ohm coax to the shack.
>
> -Scott, WU2X
>
>
You might also want to take a look at feeding one of the bottom corners.
This will give both vertical and horizontal polarization. I found it worked
great for DX; a dog for working locals, but probably no worse than vertical
p. I subsequently added a 1:1 current balun, but don't think it did anything
relative to the original setup, which had the center conductor connected to
the vertical wire.

Tam/WB2TT

754. Re: Off-center fed dipole, questions

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 20:37:46 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.21.20.37.45.208887@from.qrz.com>
Source record: 37068

Good afternoon, Richard and Dave.

Thanks for the good information. I guess I will try as Dave suggests and try some different configurations and see which one works best. Probably the one I'll try first is the Carolina Windom, for which the radiating feedline (the 22 ft. from the balun to the unun) is one of the design objectives. Not really sure about the significance of the 22 ft section between balun and unun ... it's not a quarter wavelength at anything of interest... but I'll try it and see.

755. Re: Off-center fed dipole, questions

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 21:34:41 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99944D10E9FF5nonenowhere@61.9.191.5>
Source record: 37069

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in
news:pan.2007.08.21.20.37.45.208887@from.qrz.com:

>
> Good afternoon, Richard and Dave.
>
> Thanks for the good information. I guess I will try as Dave suggests
and
> try some different configurations and see which one works best.
Probably
> the one I'll try first is the Carolina Windom, for which the radiating
> feedline (the 22 ft. from the balun to the unun) is one of the design
> objectives.

Or a marketing solution for what many might consider an unavoidable
problem. Problem becomes feature, problem solved, product hype enhanced,
everone wins!

Not really sure about the significance of the 22 ft section
> between balun and unun ... it's not a quarter wavelength at anything of
> interest... but I'll try it and see.

It is another proprietary antenna with secret components that prevent
reliable independent exploration of the design.

I am not saying it doesn't 'work' (whatever that term means), just that
it isn't capable of independent explanation.

Owen

756. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 21:54:07 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9994505C4FAA8nonenowhere@61.9.191.5>
Source record: 37070

Jon =?utf-8?Q?K=C3=A5re?= Hellan <dev@null.com> wrote in
news:1m4pitw2u4.fsf@persaunet.uninett.no:

> Sorry. I didn't notice that I cut everything you wrote, but left your
> name in.

Apolgy accepted.

Please be carefull putting silly words into the mouths of others. If I appear to have overreacted, it is because it would well suit the BPL box movers to damage my credibility.

Owen

757. Re: Off-center fed dipole, questions

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 21:55:00 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fafmvk$i0j$1@news.jpl.nasa.gov>
Source record: 37071

Owen Duffy wrote:
> "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in
> news:pan.2007.08.21.20.37.45.208887@from.qrz.com:
>
>
>>Good afternoon, Richard and Dave.
>>
>>Thanks for the good information. I guess I will try as Dave suggests
>
> and
>
>>try some different configurations and see which one works best.
>
> Probably
>
>>the one I'll try first is the Carolina Windom, for which the radiating
>>feedline (the 22 ft. from the balun to the unun) is one of the design
>>objectives.
>
>
> Or a marketing solution for what many might consider an unavoidable
> problem. Problem becomes feature, problem solved, product hype enhanced,
> everone wins!
>
> Not really sure about the significance of the 22 ft section
>
>>between balun and unun ... it's not a quarter wavelength at anything of
>>interest... but I'll try it and see.
>
>
> It is another proprietary antenna with secret components that prevent
> reliable independent exploration of the design.

It's probably because they got a good deal on some premade 25 foot
cables which were inadvertently too short, or the first one built
happened to be 22 feet off the ground, or something like that. Maybe
they had a source for 22 foot scraps?

I doubt there's anything special about the 22 ft. As many have pointed
out, it's a deliberately unbalanced antenna which radiates from both
vertical and horizontal parts (and influenced by the towers, trees, and
buildings nearby), with a nice choke at some point to keep RF from
coming back in the shack on the outside of the coax.

>
> I am not saying it doesn't 'work' (whatever that term means), just that
> it isn't capable of independent explanation.
>
> Owen

758. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 22:30:05 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <NHJyi.698$YQ.462@nlpi061.nbdc.sbc.com>
Source record: 37072

Owen Duffy wrote:
> <dev@null.com> wrote:
>> Sorry. I didn't notice that I cut everything you wrote, but left your
>> name in.
>
> Apolgy accepted.

Actually, with nested well-behaved newsreader
software doing the attributions, one doesn't
have to worry at all about such.

If one sees:

>> w5dxp wrote:

Owen Duffy wrote:
>>> I admit that I am an asshole.

it can actually be attributed to w5dxp.
--
73, Cecil http://www.w5dxp.com

759. Re: Off-center fed dipole, questions

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 22:34:17 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <JLJyi.699$YQ.459@nlpi061.nbdc.sbc.com>
Source record: 37073

Jim Lux wrote:
> I doubt there's anything special about the 22 ft.

I've been told that 22 ft. is special, i.e.
virtually everyone can get his vertical
section 22 feet off the ground. (The original
Windom had a vertical radiating section.)
--
73, Cecil http://www.w5dxp.com

760. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 22:38:48 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns999457EF82BE3nonenowhere@61.9.191.5>
Source record: 37074

Cecil Moore <nospam@w5dxp.com> wrote in news:NHJyi.698$YQ.462
@nlpi061.nbdc.sbc.com:

> Owen Duffy wrote:
>> <dev@null.com> wrote:
>>> Sorry. I didn't notice that I cut everything you wrote, but left your
>>> name in.
>>
>> Apolgy accepted.
>
> Actually, with nested well-behaved newsreader
> software doing the attributions, one doesn't
> have to worry at all about such.
>
> If one sees:
>
> >> w5dxp wrote:
>
> Owen Duffy wrote:
> >>> I admit that I am an asshole.
>
> it can actually be attributed to w5dxp.

Cecil, for all your claimed IQ, you are just offensive... Owen

761. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 22:40:00 UTC
From: Mark Whitlock <markw@leadmon.net>
Message-ID: <1187736000.968244.18610@m37g2000prh.googlegroups.com>
Source record: 37075
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

On Aug 3, 4:19 pm, Rozagy <Roz...@aol.com> wrote:

> All the people I know with AS have an official dx by recognised
> clinical psychologists specialising in Autism and Asperger's.
> Including myself.
I have an official DX-4 (486- 133 Mhz). Does that mean I'm autistic ?

Mark.

762. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 22:50:07 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1187736607.147256.236380@l22g2000prc.googlegroups.com>
Source record: 37076
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna

On Aug 21, 3:40 pm, Mark Whitlock <ma...@leadmon.net> wrote:
> On Aug 3, 4:19 pm, Rozagy <Roz...@aol.com> wrote:
>
> > All the people I know with AS have an official dx by recognised
> > clinical psychologists specialising in Autism and Asperger's.
> > Including myself.
>
> I have an official DX-4 (486- 133 Mhz). Does that mean I'm autistic ?
>
> Mark.

DX-4 di da doh !

763. Re: Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 23:18:05 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46cb72aa$0$6469$4c368faf@roadrunner.com>
Source record: 37077

> effect on strength or life... I will leave you to think about that.
>
> In this part of the world, riggers are supposed to inspect working fibre
> ropes and condemn rope that is contaminated with paint or any type of
> solvent.
>
> Owen

This is especially true of saftey harnesses. During annual harness
inspection there is always someone who wrote their name on the harness with
a marker.
This harness must be condemned.

Jimmie

764. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 23:38:42 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <6IKyi.1347$vU4.292@nlpi068.nbdc.sbc.com>
Source record: 37078

Owen Duffy wrote:
> Cecil, for all your claimed IQ, you are just offensive... Owen

Any psychologist will tell you that, for whatever reason,
you are exercising your right to choose to be offended.
I certainly did not intend to offend anyone.
--
73, Cecil http://www.w5dxp.com

765. Re: Off-center fed dipole, questions

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-21 23:48:12 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13cmudrghsk5n47@corp.supernews.com>
Source record: 37079

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in message
news:pan.2007.08.21.00.29.33.465109@from.qrz.com...
>
> On page 7-10 of the 20th edition of the ARRL Antenna Book is a description
> of an off-center fed dipole. I have the necessary materials around here
> so I thought I'd experiment with that a bit and see how it does.
>
> I'm a little confused about the balun.
>
> I don't have a 4:1 or 6:1 current balun, but I do have a 4:1 W2AU-type
> balun and an MFJ-915 RF Isolator, what they call a "1:1 current balun"
> (actually an unun). I figured on connecting the latter to the former with
> a double male PL-259 adapter and then connecting the coax to the other end
> of the unun ... rather heavy, and no way to support it at the balun, and
> it'll no doubt droop like a 400-pound beer belly, but I guess I'll jump
> off of that bridge when I come to it...
>
> The instruction sheet for the MFJ-915 says I should put the unun in the
> line at the transmitter end, and yet the discussion of the OCF dipole in
> the Antenna Book shows the 4:1 current balun at the antenna and a length
> of coax to the transmitter.
>
> So, should I connect the unun to the balun as I have it, or should I
> connect it at the transmitter end as MFJ advises?
>
> It does seem that if the objective is to keep RF off the outside of the
> coax, the unun really should go up at the antenna end.
>
> What say you?
>

I would not worry too much about it, Just stick up something and see what
hapens. Wire is not that expensive. I have an OCF up about 45 feet and it
seems to work ok. Usually beter on 80 meters than an 80 meter dipole at 20
feet that is at right angles to it. The OCF is around 125 feet long and has
a 4:1 balun of somekind about 1/3 of the way on the horizontal wire, then
about 40 feet drooping rg8x to about 10 turns of coax on a piece of pvc pipe
and then into the shack. Seems to work ok on 80 and 40 meters. I have a
beam up for 20/15/10 so don't care how it works there, but sometimes it does
not do too much less thant he beam in some directions. The beam is usually
much beter most of the time as it is at 60 feet.

766. Re: kelp is good for you

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 00:01:50 UTC
From: Mark@TayleorRobesin.org
Message-ID: <btfmc3d4kp0a0954g7ijg5lc061l9qg0r9@4ax.com>
Source record: 37080
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

On Sun, 12 Aug 2007 14:54:46 -0700, an_old_friend
<konstans@hotmail.com> wrote:

>On Aug 12, 5:50 pm, "kb9rqz" <kbp...@punce.net> wrote:
>> 1) I was draft into the US Army.
>never said that
>
>> 2) I is a member of the Chemcal Cops
>
>I said in correect gramaur
>
>> 3) The military wont let me retire.
>
>never said that either
>
>> 4) I dosn't serve under the name 'Mark Morgan but that's okay cuz theFBI,
>> DOD, and CIA have al todl me I candodit.
>
>did not say that either
>
>> 5) I is on-the-lam from stalking former marines and fatal
>> atraction four ex-shemale wife almoney
>
>absolutely never said that nor is it true
>
>> 6) I was recenty, paying $5/hr. to acess my ISP
>
>no not rrecently
>
>> 7) I has a 248 IQ, but cant figre out how touse a spel checker.
>
>wrong again
>
>> 8) I is a bi-sexual Pagan male ham who like to be spanked.
>
>true enough
>
>> 9) I can't find any action on the military base in Central IL, so I hav to
>> ask the peple on th USNET.
>nope
>
>on in 9 oh fake

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

G

--
Posted via a free Usenet account from http://www.teranews.com

767. Re: Off-center fed dipole, questions

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 00:34:23 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fag0afede1@news.jpl.nasa.gov>
Source record: 37081

Cecil Moore wrote:
> Jim Lux wrote:
>
>> I doubt there's anything special about the 22 ft.
>
>
> I've been told that 22 ft. is special, i.e.
> virtually everyone can get his vertical
> section 22 feet off the ground. (The original
> Windom had a vertical radiating section.)

As opposed to 20 ft or 21 ft or 25 ft?

I find it hard to believe that there's an electrical reason for 22ft.
Mechanical or convenience I can believe.

Maybe it fits well with the length of their isolators, etc. and matches
a convenient pole height (e.g. isolator plus sag plus 22ft plus whatever
exactly matches 26 ft 3" or whatever the pole is)

768. Re: Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 00:35:22 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fag0caede2@news.jpl.nasa.gov>
Source record: 36982

Jimmie D wrote:
>>effect on strength or life... I will leave you to think about that.
>>
>>In this part of the world, riggers are supposed to inspect working fibre
>>ropes and condemn rope that is contaminated with paint or any type of
>>solvent.
>>
>>Owen
>
>
> This is especially true of saftey harnesses. During annual harness
> inspection there is always someone who wrote their name on the harness with
> a marker.
> This harness must be condemned.
>
> Jimmie
>
>
Isn't that what the tag is for? (a non-structural part that's sewn on
and write-on-able)

769. Re: "Extension" antenna ?in?sanity check, please?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 02:20:18 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46cb9d74$0$16527$4c368faf@roadrunner.com>
Source record: 36983

"Dave Platt" <dplatt@radagast.org> wrote in message
news:f42so4-as9.ln1@radagast.org...
> In article <46bb3099.9242828@news.optonline.net>,
> Rick <ricknj10@hotmail.com> wrote:
>
>>Since you have so much signal at the router, you might get away with it,
>>even
>>though there will be a lot of loss in the coax. Incidentally it is
>>probably
>>RG-59.
>
> One on-line coax-loss calculator indicates about 144 dB of loss in
> RG-59, at 2.4 GHz over an 800-foot span.
>
> Added to the antenna losses at both ends, and I have real doubts as to
> whether a usable signal will result. It *might* work if the 802.11
> radios were plugged directly into the coax, with no antennas involved,
> but that does not sound feasible.
>
If you loss on the cable is correct it will not work even if the computer is
wired directly to the router. If I remember correctly a router puts out
about a plus 20 db signal and the rx requires about -86db. Ive done this
between two building where a big low loss 75 ohm hardline was already in
place. just barely getting enough signal at 500 yds.

Jimmie

770. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 02:39:50 UTC
From: Tom Brown <n4tab-public@earthlink.net>
Message-ID: <13cn8fn6l7mij2e@corp.supernews.com>
Source record: 36984

John Smith I wrote:
> http://www.redherring.com/Home/22562
>
> JS

Golly....I'm unwilling to read through a litany of knee-jerk responses; did anybody notice that this BPL deployment is Current Communications? And, does anybody know that they utilize 30 -50 MHz on the overhead segments and the HomePlug protocol on the LV segments (Homeplug notches the Amateur bands).

In Ohio, Current passes >10,000 homes and NOT ONE HAM COMPLAINT. Why is this? Simple. Not in our backyard.

And don't tell me I don't know about this - I stood toe-to-toe with Progress Energy engineers in NC prior to the FCC 04-37 ruling; measured, wrote and got dirty in the process.

Where was everybody else?

BPL can be deployed outside the Amateur Bands without insult within our allocations.

73,

Tom N4TAB

771. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 04:48:32 UTC
From: Stuart Grey <stuart.grey@comcast.net>
Message-ID: <MrOdnaoo68e9XVbbnZ2dnUVZ_u3inZ2d@comcast.com>
Source record: 36985
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

On Tue, 21 Aug 2007 15:40:00 -0700, Mark Whitlock wrote:

> On Aug 3, 4:19 pm, Rozagy <Roz...@aol.com> wrote:
>
>> All the people I know with AS have an official dx by recognised
>> clinical psychologists specialising in Autism and Asperger's.
>> Including myself.
> I have an official DX-4 (486- 133 Mhz). Does that mean I'm autistic ?

It means your antiquetic.

772. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 06:23:23 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1187763803.167528.37720@i38g2000prf.googlegroups.com>
Source record: 36986
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna

On Aug 21, 9:48 pm, Stuart Grey <stuart.g...@comcast.net> wrote:
> On Tue, 21 Aug 2007 15:40:00 -0700, Mark Whitlock wrote:
> > On Aug 3, 4:19 pm, Rozagy <Roz...@aol.com> wrote:
>
> >> All the people I know with AS have an official dx by recognised
> >> clinical psychologists specialising in Autism and Asperger's.
> >> Including myself.
> > I have an official DX-4 (486- 133 Mhz). Does that mean I'm autistic ?
>
> It means your antiquetic.

DOH !

773. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 06:24:00 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1187763840.365842.223190@j4g2000prf.googlegroups.com>
Source record: 36987
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

On Aug 21, 3:40 pm, Mark Whitlock <ma...@leadmon.net> wrote:
> On Aug 3, 4:19 pm, Rozagy <Roz...@aol.com> wrote:
>
> > All the people I know with AS have an official dx by recognised
> > clinical psychologists specialising in Autism and Asperger's.
> > Including myself.
>
> I have an official DX-4 (486- 133 Mhz). Does that mean I'm autistic ?
>
> Mark.

! HOD

774. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 06:40:52 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1187764852.603927.280270@j4g2000prf.googlegroups.com>
Source record: 36988
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna

On Aug 21, 3:40 pm, Mark Whitlock <ma...@leadmon.net> wrote:
> On Aug 3, 4:19 pm, Rozagy <Roz...@aol.com> wrote:
>
> > All the people I know with AS have an official dx by recognised
> > clinical psychologists specialising in Autism and Asperger's.
> > Including myself.
>
> I have an official DX-4 (486- 133 Mhz). Does that mean I'm autistic ?
>
> Mark.

DX-4 - di, Da. DOH !

775. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 07:00:10 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1mzm0kuk91.fsf@persaunet.uninett.no>
Source record: 36989

Cecil Moore <nospam@w5dxp.com> writes:

> Actually, with nested well-behaved newsreader
> software doing the attributions, one doesn't
> have to worry at all about such.

If I hadn't removed what Owen said, there wouldn't have been a
problem. But I accidentally left "Owen said", but not *what* Owen
said. Hence the confusion.

73
LA4RT Jon

776. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 11:16:18 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <6WUyi.47287$Um6.2098@newssvr12.news.prodigy.net>
Source record: 36990

Jon Kï¿½re Hellan wrote:
> Cecil Moore <nospam@w5dxp.com> writes:
>> Actually, with nested well-behaved newsreader
>> software doing the attributions, one doesn't
>> have to worry at all about such.
>
> If I hadn't removed what Owen said, there wouldn't have been a
> problem. But I accidentally left "Owen said", but not *what* Owen
> said. Hence the confusion.

I haven't seen the posting but my point is that with
a well-behaved newsreader, there is no problem and no
confusion except in the minds of the uninitiated. If
we see the following: ">> Jon Kï¿½re Hellan wrote:" and
there is nothing starting with ">>>", then we know that
what you said has been trimmed and your attribution line
has been accidentally left intact. There's really no
problem and no confusion among the knowledgeable posters
and education might be a better solution than an apology.
--
73, Cecil http://www.w5dxp.com

777. QuBits

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 11:24:23 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <H1Vyi.4459$LL7.3613@nlpi069.nbdc.sbc.com>
Source record: 36991

In the August 2007 IEEE "Spectrum" magazine is an
article titled "The Trap Technique" that tells how
qubits (quantum bits) are likely to replace
conventional computer functions such as memories.
They have a half-page graphic on quantum
entanglement on page 39 that suggests it may be
possible in the future to use the phenomenon for
transferring bits of information instantaneously.
--
73, Cecil http://www.w5dxp.com

778. Re: Off-center fed dipole, questions

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 15:17:41 UTC
From: Bob Spooner <rls19@psu.edu>
Message-ID: <fahk2l$18o2$1@f04n12.cac.psu.edu>
Source record: 36992

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message >
> ...
> I doubt there's anything special about the 22 ft. As many have pointed
> out, it's a deliberately unbalanced antenna which radiates from both
> vertical and horizontal parts (and influenced by the towers, trees, and
> buildings nearby), with a nice choke at some point to keep RF from coming
> back in the shack on the outside of the coax.
> ...
If the choke is effective in removing the common mode current, then the
feedline will not radiate very much.

73,
Bob AD3K

779. Re: Off-center fed dipole, questions

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 16:13:11 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <2pnoc3p4op77vbgqr6gh7re6tdiedqndtf@4ax.com>
Source record: 36993

On Tue, 21 Aug 2007 17:34:23 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>Cecil Moore wrote:
>> Jim Lux wrote:
>>
>>> I doubt there's anything special about the 22 ft.
>>
>>
>> I've been told that 22 ft. is special, i.e.
>> virtually everyone can get his vertical
>> section 22 feet off the ground. (The original
>> Windom had a vertical radiating section.)
>
>As opposed to 20 ft or 21 ft or 25 ft?
>
>I find it hard to believe that there's an electrical reason for 22ft.
>Mechanical or convenience I can believe.
>
>Maybe it fits well with the length of their isolators, etc. and matches
>a convenient pole height (e.g. isolator plus sag plus 22ft plus whatever
>exactly matches 26 ft 3" or whatever the pole is)

Looking through the Radio Works catalog, the vertical radiators are
22' for 80m & 160m versions, 10' for a 40m version, 18' for an
enhanced 40m version of the Carolina Windom.

So they're figuring something, what, not sure of...

bob
k5qwg

780. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 16:15:19 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <1187799319.244285.56490@r23g2000prd.googlegroups.com>
Source record: 36994

On Aug 21, 10:39 pm, Tom Brown <n4tab-pub...@earthlink.net> wrote:
> John Smith I wrote:
> >http://www.redherring.com/Home/22562
>
> > JS
>
> Golly....I'm unwilling to read through a litany of knee-jerk responses;
> did anybody notice that this BPL deployment is Current Communications?
> And, does anybody know that they utilize 30 -50 MHz on the overhead
> segments and the HomePlug protocol on the LV segments (Homeplug notches
> the Amateur bands).
>
> In Ohio, Current passes >10,000 homes and NOT ONE HAM COMPLAINT. Why is
> this? Simple. Not in our backyard.

No surprise there. How many active hams live in that particular BPL
service area? Cincinnati . . . ? .

> And don't tell me I don't know about this - I stood toe-to-toe with
> Progress Energy engineers in NC prior to the FCC 04-37 ruling; measured,
> wrote and got dirty in the process.
>
> Where was everybody else?

In Emmaus PA with my trusty 'ole TS-50S mobile HF xcvr. With Ed Hare
W1RFI, Carl WK3C and with Bob W3HJ and his beacoup kilobucks (HP?
Tek?) spectrum analyzer. Which very graphically and chillingly
illustrated how the OFDM BPL in that neighborhood was completely
trashing most of the HF ham bands I'd previously tuned with the TS50.
Talk about 599 crap . . !

> BPL can be deployed outside the Amateur Bands without insult within our
> allocations.

Have you ever heard about what happens when you let the camel "just
poke his nose into the tent"?

> 73,
>
> Tom N4TAB

w3rv

781. Re: Off-center fed dipole, questions

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 16:40:29 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fahott$3qu$1@news.jpl.nasa.gov>
Source record: 36995

Bob Spooner wrote:
> "Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message >
>
>>...
>>I doubt there's anything special about the 22 ft. As many have pointed
>>out, it's a deliberately unbalanced antenna which radiates from both
>>vertical and horizontal parts (and influenced by the towers, trees, and
>>buildings nearby), with a nice choke at some point to keep RF from coming
>>back in the shack on the outside of the coax.
>>...
>
> If the choke is effective in removing the common mode current, then the
> feedline will not radiate very much.
choke at the shack, was my thinking.. I believe that the original intent
of the design was that the feedline could radiate. It's a compromise
antenna of sorts, so one can't be too picky about patterns,
polarization, etc.

I also recall seeing a diagram with choke on the ground, and feedline to
shack laying on ground (which would, of course, tend to reduce any
coupling to it)..

I suppose the real question is whether there is a statistically
significant difference in performance between this and any other random
dipole. If 100 hams put up a Carolina Windom, and 100 hams put up an
OCF dipole of some other sort, and 100 hams put up a multiband dipole,
will the variations within the groups be larger than the variations
between the groups. I suspect they will. For low gain antennas in
random installations, there's so many other factors that influence
pattern and efficiency that I doubt you could accurately measure the
difference.

Probably more important just to get some sort of wire in the air and
somehow get a match so the transmitter doesn't fold back, and not worry
too much.

782. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 17:49:14 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fahsv2$1er4$1@f04n12.cac.psu.edu>
Source record: 36996

Jim Lux wrote:
> Michael Coslo wrote:
>> Dave Oldridge wrote:
>>
>>> Algorithms will only help you by slowing down and using redundancy or
>>> by being frequency agile and thereby clearng off my frequency. And
>>> NO equipment DESIGNED to be a sensitive receiver at the frequencies
>>> you want to use will be immune to even stronger signals picked up by
>>> the open ANTENNA that you're using for a "transmission cable."
>>
>>
>>
>> Good point, Dave. Any error correction comes with the expense of
>> time, and of course slows down the transmission of the data. The
>> packet doesn't jibe, so it is asked for again, and again, and so on.
>> Better be a heck of a algorithim when the interfering signal is really
>> strong as to swamp the modem's reciever.
>
> This is only true if you're doing a ARQ type protocol. If you're
> expecting interference (and BPL certainly is), a Forward Error
> Correction type strategy would be a much better bet. For instance, ECC
> memory uses a rate 8/11 code (3 syndrome bits for 8 databits) to correct
> any single bit error and detect double bit errors. For BPL, one would
> probably choose some form of multiple carrier encoding (since
> interferers are likely to be narrow band) with some form of interleaving
> (since interferers are bursty), and a fairly robust code.

Are you talking about OFDM?

> The whole art and engineering of communication link design comes from
> selecting that tradeoff between redundancy and reliability. Do you send
> twice as many bits, twice as fast, to get an overall lower data rate
> (e.g. a rate 1/2 code).
>
>>
>> There are plenty of examples to the contrary of the digital signal
>> as robust entity. Experiments have been made in which a 5 watt signal
>> in a car with a mobile antenna will knock out nearby BPL signals. 100
>> watts in a car will do even more damage, and a base station yet more.
>> Other experiments have shown the so called notches being abandoned
>> after the system was unable to send good packets. Kind of like it was
>> getting desperate almost.
>
> But this is merely an example of a specific bad implementation of BPL.
> There's no physics reason why one couldn't make it work (whether it's

> cost effective is another story).

Sure! They could start running our power into the house through coax! ;^)

>>
>> Seeing as how qrp levels into inefficient antennas can cause
>> problems, I have to wonder what will happen during the next sunspot max.
>
> The signal level received via ionospheric paths are so low, that the BPL
> receiver isn't going to have any trouble regardless of how good
> propagation is. OTOH, the interference radiated by BPL will spread that
> much wider.

Has asny testing been done on the level of signal needed to start
affecting a BPL type signal? So far, we've gotten the stories like I've
given above, which are practical if anecdotal.

>> The whole BPL affair makes me kind of wonder why shielding was
>> invented.
>>
>> And for what? a DSL speed "broadband" digital signal? BPL is a
>> poor solution to the problems of ten years ago. It is the 8-track of
>> broadband access.
>
> But it if it provides access to capital markets for the relatively small
> number of people working in the BPL industry, so they can get paid their
> salaries and bonuses, then it's a good thing for them.

Sounds like a plausible rationale for the crystal meth industry, too!

> It doesn't actually have to *work* to succesfully employ hundreds of
> people and get dozens of people a big bonus. Sure, eventually, it will
> fall by the wayside and be abandoned, and all those BPL toilers will go
> on to a new technology or job. I'm sure there were folks who made a lot
> of money on Betamax cassette design and manufacturing too. (or 8 tracks,
> for that matter)

Since we're wearing our cynic hats today, let me toss in a theory of my
own here.

BPL, being a "last mile" system, requires that there be fiber run
almost the whole way to peoples houses. This means that unless you are
the last person or service group on the line, there is a very good
chance that fiber will be running right past your house. Signal off THAT
is what you really want. Fast, reliable, doesn't suffer from that
electrically noisy cracked insulator that the neighbor's kid shot with
his pellet gun, etc. You won't have to worry about that isolator failing
and sending lots more volts than you are paying for into the house
(likely just going to blow the device apart - but are you willing to bet
the farm on that?

At any rate, anyone give thoughts to this being just a way to get the
public utilities to run more fiber, then at a later date, take it over

commercially and service the rest of us with that?

Pure speculation that.

- 73 de Mike KB3EIA -

783. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 18:00:35 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fahtk3$11le$1@f04n12.cac.psu.edu>
Source record: 36997

Cecil Moore wrote:
> Jon Kï¿½re Hellan wrote:
>> Cecil Moore <nospam@w5dxp.com> writes:
>>> Actually, with nested well-behaved newsreader
>>> software doing the attributions, one doesn't
>>> have to worry at all about such.
>>
>> If I hadn't removed what Owen said, there wouldn't have been a
>> problem. But I accidentally left "Owen said", but not *what* Owen
>> said. Hence the confusion.
>
> I haven't seen the posting but my point is that with
> a well-behaved newsreader, there is no problem and no
> confusion except in the minds of the uninitiated. If
> we see the following: ">> Jon Kï¿½re Hellan wrote:" and
> there is nothing starting with ">>>", then we know that
> what you said has been trimmed and your attribution line
> has been accidentally left intact. There's really no
> problem and no confusion among the knowledgeable posters
> and education might be a better solution than an apology.

Good heavens guys!

Jon just made a little joke in response to my little joke about the oversensitivity of some people to silly things such as BPL signals on electric blankets

Instead we have our esteemed members showing their own version of oversensitivity. No new age accoutrement needed

It was a joke followed by a joke. Everyone stand back, take a deep breath, skip that fifth cup of espresso, and please accept me appy lolly gees for starting this sub tiff.

Great bolshy yarblockos!

- 73 de Mike KB3EIA -

784. Re: Off-center fed dipole, questions

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 18:06:18 UTC
From: Tehrasha Darkon <darkon@netins.net>
Message-ID: <pan.2007.08.22.18.06.20@netins.net>
Source record: 36998

On Wed, 22 Aug 2007 11:13:11 -0500, Bob Miller wrote:

>
> Looking through the Radio Works catalog, the vertical radiators are 22'
> for 80m & 160m versions, 10' for a 40m version, 18' for an enhanced 40m
> version of the Carolina Windom.
>
> So they're figuring something, what, not sure of...
>
> bob
> k5qwg

My guess is that the length of the vertical segment is such that it acts as a matching segment to keep the overall impedance of the antenna at a reasonably matchable level.

That was my primary reason for choosing the New Carolina Windom, over the venerable G5RV. The impedance mismatch onthe NCW is almost never over 3:1. Which is all that my auto-tuner is rated to handle, while the G5RV can easily exceeded 5:1 on some bands. (I saw an article that did a great job of comapring impedances between these two antennas, but I can not seem to find it now)

I built my own NCW based on the measurements in this QRP Expressions article. http://www.w5fc.org/files/QRP%20Expressions.pdf

I liked it so much, I built the larger 80m version, with measurments from the RadioWorks website. I did not have a 22' of coax handy at the time, so I used a 14' piece that was left over from another project.

It seems to work just fine on everything but 17m. The autotuner tried and tried but could not cope. Finally I replaced it with the correct 22' lenth, and 17m once again tunable. So there is -something- to it.

--Teh

785. Re: Off-center fed dipole, questions

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 18:29:44 UTC
From: dplatt@radagast.org
Message-ID: <otbup4-052.ln1@radagast.org>
Source record: 36999

>> I doubt there's anything special about the 22 ft. As many have pointed
>> out, it's a deliberately unbalanced antenna which radiates from both
>> vertical and horizontal parts (and influenced by the towers, trees, and
>> buildings nearby), with a nice choke at some point to keep RF from coming
>> back in the shack on the outside of the coax.
>> ...

>If the choke is effective in removing the common mode current, then the
>feedline will not radiate very much.

I believe that's not necessarily true.

If the distance between the main feedpoint, and the common-mode choke
is close to 1/4 wavelength at the frequency in question, then the
impedance "looking down" the outside feedline from the main feedpoint
will be relatively low, and a fair bit of RF current will flow on the
outside of the feedline. I think it's also likely that the choke
will have difficulty being very effective in this location, as it will
have to have a very high choking reactance.

If the distance from feedpoint to choke is close to a half-wavelength,
not much current will flow.

If the distance is somewhere in the middle, the outside-of-the-
feedline impedance will be rather reactive. This reactivity may
interact with the reactivity of the radiator... e.g. if the feedline
impedance is inductive, and the radiator's impedance is capacitive,
the two might tend to cancel out to some extent. This could have two
effects - a significant amount of RF current flow on the outside of
the feedline, and (perhaps) a better impedance match at the
feedpoint/balun and a lower SWR as seen by the rig.

It's possible that the 22' vertical-section length for the Carolina
Windom was selected, after experimentation, to provide the best
matching of the antenna/balun/choke system to a 50-ohm transmitter on
certain bands on which it would otherwise be difficult to match.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

786. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 19:54:02 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fai48p$l9o$1@news.jpl.nasa.gov>
Source record: 37000

Michael Coslo wrote:
> Jim Lux wrote:
>
>>
>> This is only true if you're doing a ARQ type protocol. If you're
>> expecting interference (and BPL certainly is), a Forward Error
>> Correction type strategy would be a much better bet. For instance, ECC
>> memory uses a rate 8/11 code (3 syndrome bits for 8 databits) to
>> correct any single bit error and detect double bit errors. For BPL,
>> one would probably choose some form of multiple carrier encoding
>> (since interferers are likely to be narrow band) with some form of
>> interleaving (since interferers are bursty), and a fairly robust code.
>
>
>
> Are you talking about OFDM?

That would be one possible implementation. There are others. For
instance, MultiTone FSK is another. Multitone PSK like Link-11/TADIL-A
(which has been used for HF comms for decades) is another.

>
>>> There are plenty of examples to the contrary of the digital
>>> signal as robust entity. Experiments have been made in which a 5 watt
>>> signal in a car with a mobile antenna will knock out nearby BPL
>>> signals. 100 watts in a car will do even more damage, and a base
>>> station yet more. Other experiments have shown the so called notches
>>> being abandoned after the system was unable to send good packets.
>>> Kind of like it was getting desperate almost.
>>
>>
>> But this is merely an example of a specific bad implementation of BPL.
>> There's no physics reason why one couldn't make it work (whether it's
>> cost effective is another story).
>
>
> Sure! They could start running our power into the house through
> coax! ;^)
>
More, I was thinking that the early BPL implementations used fairly
simple receivers and transmitters which aren't particularly interference
immune. Technology, particularly for digital processing, advances quite
quickly.

>
>>>
>>> Seeing as how qrp levels into inefficient antennas can cause
>>> problems, I have to wonder what will happen during the next sunspot max.
>>
>>
>> The signal level received via ionospheric paths are so low, that the
>> BPL receiver isn't going to have any trouble regardless of how good
>> propagation is. OTOH, the interference radiated by BPL will spread
>> that much wider.
>
>
> Has asny testing been done on the level of signal needed to start
> affecting a BPL type signal? So far, we've gotten the stories like I've
> given above, which are practical if anecdotal.

This would be complicated by the fact that there's not just one "BPL
type signal" or, more accurately, one "BPL implementation". One could
design a system using, say, BPSK that is hideously unrobust and another
system, also using BPSK that is very robust.

For instance, BPL doesn't need to have good doppler tolerance, and could
rely on recovering a very stable frequency reference, something that
wouldn't be practical in, say, a cellphone.
>
>
>> But it if it provides access to capital markets for the relatively
>> small number of people working in the BPL industry, so they can get
>> paid their salaries and bonuses, then it's a good thing for them.
>
>
> Sounds like a plausible rationale for the crystal meth industry, too!

Probably more people in that business than in BPL.
>
>
>

787. Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 21:37:06 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <602zi.82535$rX4.27870@pd7urf2no>
Source record: 37001

Hi,

I'm trying to determine if using an antenna analyzer is technically a violation of the telecommunications Code of Federal Regulations. Typical antenna analyzers inject a incident CW or sweeping CW to the antenna and measure its return loss (reflection). Very few frequency bands have a CW or sweeping CW as their allowed modulation type. The way I see it is that by using an antenna analyzer you are intentionally radiating an improper modulation type that was allocated for the band and therefore you are in violation of the Code of Federal Regulations.

Anyone have any thoughts on this topic?

Thomas Magma

788. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 22:04:01 UTC
From: gsm@mendelson.com
Message-ID: <slrnfcpcgn.toq.gsm@cable.mendelson.com>
Source record: 37002

Thomas Magma wrote:
> I'm trying to determine if using an antenna analyzer is technically a
> violation of the telecommunications Code of Federal Regulations. Typical
> antenna analyzers inject a incident CW or sweeping CW to the antenna and
> measure its return loss (reflection). Very few frequency bands have a CW or
> sweeping CW as their allowed modulation type. The way I see it is that by
> using an antenna analyzer you are intentionally radiating an improper
> modulation type that was allocated for the band and therefore you are in
> violation of the Code of Federal Regulations.
>
> Anyone have any thoughts on this topic?

By your logic a noise bridge would also be illegal. However in most places
there is a limit on the amount of power one can use before it requires
a license. Since an antenna analyzer puts out a few microwatts, if that,
no one seems to care.

I do not have the capability to measure the power level of mine, but I
expect that it is less than a regenerative receiver. It would be easy
to test, place one on an antenna and try to tune it in with a portable
receiver. If you can hear it, move away and see how far it goes.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

789. Leaky Coax V's Wire Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 22:37:04 UTC
From: David <dhuisman@bigpond.net.au>
Message-ID: <kU2zi.24525$4A1.9103@news-server.bigpond.net.au>
Source record: 37003

I have an application where I want a vehicle to detect whether it is entering or exiting a particular area in a building. The accessways are typically about 5m across and there have been problems using infra-red, reflective tape and RFID technologies.

I would like to try 2 Stips across the accessway that are spaced about 1m apart and act as antennas for a 915MHz transmission.

One strip would transmit the first zone ID and the other the second zone. The Receiver on the vehicle would use the RSSI and Zone ID to determine which way it was travelling.

In theory I think this may work. I am considering a prototype using leakt coax as the strip but the only type I can source here in Australia so far is 28mm diameter (cause a bump in the vehicle by the time this is placed into a conduit to protect it).

Would it be feasible to use simple metal strips as antennas that are tuned to length to be exact multiple of 1/2 wave ? I would then expect that there would be a peak signal every 1/2 wave along the length of the metal strip.

The receiver antenna on the vehicle will only be around 500mm above the ground so the transmit power can be low and high loss in the strip can be tolerated. The lower the power the better as it will minimize interaction between the strips.

Thanks for your comments

Regards

David

790. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 22:44:17 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13cpf212c97scad@corp.supernews.com>
Source record: 37004

"Thomas Magma" <somewhere@overtherainbow.com> wrote in message
news:602zi.82535$rX4.27870@pd7urf2no...
> Hi,
>
> I'm trying to determine if using an antenna analyzer is technically a
> violation of the telecommunications Code of Federal Regulations. Typical
> antenna analyzers inject a incident CW or sweeping CW to the antenna and
> measure its return loss (reflection). Very few frequency bands have a CW
> or sweeping CW as their allowed modulation type. The way I see it is that
> by using an antenna analyzer you are intentionally radiating an improper
> modulation type that was allocated for the band and therefore you are in
> violation of the Code of Federal Regulations.
>
> Anyone have any thoughts on this topic?
>
> Thomas Magma

Low power test gear is listed as a permitted form of radiation. While a
signal generator is permitted for use as a test instrument, it would not be
legal to use it for say a transmitter on a ham band that you are not licened
to use.
YOu could legally use it for a ham band transmitter if you followed all the
other part 95 rules.

791. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 23:04:08 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <lh3zi.82605$rX4.66763@pd7urf2no>
Source record: 37005

>
> Low power test gear is listed as a permitted form of radiation. While a
> signal generator is permitted for use as a test instrument, it would not
> be legal to use it for say a transmitter on a ham band that you are not
> licened to use.
> YOu could legally use it for a ham band transmitter if you followed all
> the other part 95 rules.
>
>
>

Hi Ralph,
I don't mean to sound offensive, but do you know for a fact that low power test gear is a permitted form of intentional radiation? I wonder what constitutes 'low power'. Do you know where this is written so I can research it myself?

Thanks,
Thomas

792. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 23:07:03 UTC
From: dplatt@radagast.org
Message-ID: <n5sup4-dc7.ln1@radagast.org>
Source record: 37006

>> I'm trying to determine if using an antenna analyzer is technically a
>> violation of the telecommunications Code of Federal Regulations. Typical
>> antenna analyzers inject a incident CW or sweeping CW to the antenna and
>> measure its return loss (reflection). Very few frequency bands have a CW or
>> sweeping CW as their allowed modulation type. The way I see it is that by
>> using an antenna analyzer you are intentionally radiating an improper
>> modulation type that was allocated for the band and therefore you are in
>> violation of the Code of Federal Regulations.
>>
>> Anyone have any thoughts on this topic?

>By your logic a noise bridge would also be illegal. However in most places
>there is a limit on the amount of power one can use before it requires
>a license. Since an antenna analyzer puts out a few microwatts, if that,
>no one seems to care.

My understanding is that the popular MFJ antenna analyzers generate
around 2 volts RMS of RF at their output port. This works out to
around 80 milliwatts into a 50-ohm load... comparable to what a small
QRP transmitter would deliver.

>I do not have the capability to measure the power level of mine, but I
>expect that it is less than a regenerative receiver.

I think that it's more than you might expect. These analyzers don't
use a tuned detector - they use a simple diode detector (admittedly
with low-threshold / "zero bias" Schottky diodes) and they need a
reasonably hefty signal. I've heard that there are some analyzers
which use some sort of mixer-and-filter arrangement to sample the RF
(thus allowing the analyzer to reject incidental off-frequency RF such
as the AM broadcast-band signals that render MFJ analyzers rather
useless on 80 and 160 meters) but I haven't seen one myself.

As to the issues of legality - IANAL, but I think that there's
probably a way to justify their use under the CFR.

For one thing: CW modulations are authorized under Part 97 on almost
all of the ham bands (everything other than 60 meters, I believe).
Stick to the bands on which you have operating privileges, and you're
probably safe there. Feel free to turn the analyzer on and off to
send your callsign in CW at the end of your test, if you're feeling
cautious :-)

For another: Part 97 specifically authorizes "test transmissions" on
any band authorized to the control operator (with restrictions on
pulse and spread-spectrum test transmissions).

For a third thing: it's quite possible that these devices would emit a low-enough power level that they would qualify for use under Part 15 "intentional radiator" standards... and such devices are permitted to operate in most frequency bands. Such devices to have maximum-power limits, which are measured in microvolts-per-meter field strength at a specified distance - limits and distances vary by frequency band.

For a fourth: they *might* also qualify for legal use under Part 18 (Industrial, Scientific, and Medical Equipment). These devices can also operate in most frequency bands (although there are several subbands which are specifically authorized for them and are thus recommended), subject to maximum-field-strength limits similar to those specified for Part 15 devices.

I doubt that the FCC has the inclination, desire, or resources to try to forbid or limit the use of antenna analyzers. If they did, they'd have to start raiding labs all over the country and confiscating multi-thousand-dollar vector network analyzers, S-parameter test sets, and so forth. The Benevolent Association of Agilent And Anritsu Equipment Owners would no doubt start writing harsh letters to their Congressmen :-)

In practice, I suspect that you're quite safe in using such devices as long as you aren't causing harmful interference to licensed users of the bands in question... and if you believe that you are, you should of course cease transmission immijitly!

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

793. A needed Antenna Item!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 23:44:30 UTC
From: Jim NN7K <nn7kexk7zfg@noway.net>
Message-ID: <yT3zi.34512$2v1.15136@newssvr14.news.prodigy.net>
Source record: 37007

Here is a much needed thing for us antenna types!
See The Bay of "E" for details! Jim

http://cgi.ebay.com/SWRs-BUY-THEM-HERE_W0QQitemZ160148456271QQihZ006QQcategoryZ296QQssPageNameZWDVWQQrdZ1QQcmd%3Cbr%3E%3Cbr%3EZViewItem

794. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 23:47:22 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <eW3zi.82671$rX4.20537@pd7urf2no>
Source record: 37008

> I doubt that the FCC has the inclination, desire, or resources to try
> to forbid or limit the use of antenna analyzers. If they did, they'd
> have to start raiding labs all over the country and confiscating
> multi-thousand-dollar vector network analyzers, S-parameter test sets,
> and so forth.

A network analyzers is not marketed as an antenna analyzer, or even an intentional radiator for that matter. I have a signal generator, an amplifier and an antenna in my lab but it does not mean I can sweep the entire LF to UHF bands at any wattage.

> For a fourth: they *might* also qualify for legal use under Part
> 18 (Industrial, Scientific, and Medical Equipment). These devices can
> also operate in most frequency bands (although there are several
> subbands which are specifically authorized for them and are thus
> recommended), subject to maximum-field-strength limits similar to
> those specified for Part 15 devices.

I was just looking through Part 18 and it really is unclear to me, however one thing was clear to me, ISM devices are prohibited for use in certain bands. One of which is search and rescue. So now how can I test my ELT antenna installation on my aircraft if I'm violating FCC rules?

Thomas

795. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-22 23:58:43 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13cpjdjt7vofh77@corp.supernews.com>
Source record: 37009

Thomas you can start around here in the Part 15 rules.

[Code of Federal Regulations]
[Title 47, Volume 1, Parts 0 to 19]
[Revised as of October 1, 2000]
From the U.S. Government Printing Office via GPO Access
[CITE: 47CFR15.3]

[Page 676-679]

TITLE 47--TELECOMMUNICATION

CHAPTER I--FEDERAL COMMUNICATIONS COMMISSION

PART 15--RADIO FREQUENCY DEVICES--Table of Contents

Subpart A--General

Sec. 15.3 Definitions.

(dd) Test equipment is defined as equipment that is intended
primarily for purposes of performing measurements or scientific
investigations. Such equipment includes, but is not limited to, field
strength meters, spectrum analyzers, and modulation monitors.

"Thomas Magma" <somewhere@overtherainbow.com> wrote in message
news:Ih3zi.82605$rX4.66763@pd7urf2no...
> >
>> Low power test gear is listed as a permitted form of radiation. While a
>> signal generator is permitted for use as a test instrument, it would not
>> be legal to use it for say a transmitter on a ham band that you are not
>> licened to use.
>> YOu could legally use it for a ham band transmitter if you followed all
>> the other part 95 rules.
>>
>>
>>
>
> Hi Ralph,
> I don't mean to sound offensive, but do you know for a fact that low power
> test gear is a permitted form of intentional radiation? I wonder what
> constitutes 'low power'. Do you know where this is written so I can
> research it myself?
>
> Thanks,
> Thomas
>

796. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 00:15:02 UTC
From: jimp@specsol.spam.sux.com
Message-ID: <3rvup4-its.ln1@mail.specsol.com>
Source record: 37010

Thomas Magma <somewhere@overtherainbow.com> wrote:
> > I doubt that the FCC has the inclination, desire, or resources to try
> > to forbid or limit the use of antenna analyzers. If they did, they'd
> > have to start raiding labs all over the country and confiscating
> > multi-thousand-dollar vector network analyzers, S-parameter test sets,
> > and so forth.

> A network analyzers is not marketed as an antenna analyzer, or even an
> intentional radiator for that matter. I have a signal generator, an
> amplifier and an antenna in my lab but it does not mean I can sweep the
> entire LF to UHF bands at any wattage.

Then you need to get a better signal generator.

> > For a fourth: they *might* also qualify for legal use under Part
> > 18 (Industrial, Scientific, and Medical Equipment). These devices can
> > also operate in most frequency bands (although there are several
> > subbands which are specifically authorized for them and are thus
> > recommended), subject to maximum-field-strength limits similar to
> > those specified for Part 15 devices.

> I was just looking through Part 18 and it really is unclear to me, however
> one thing was clear to me, ISM devices are prohibited for use in certain
> bands. One of which is search and rescue. So now how can I test my ELT
> antenna installation on my aircraft if I'm violating FCC rules?

You test it during the time window when testing ELT's is allowed.

Since such devices have been around in one form or another for longer
than most everybody currently alive and the FCC has shown no interest
in them to date, the empirical evidence is the FCC doesn't care about
them.

And for the nitpickers, yes if you hooked one to an antenna and left
it turned on for days, someone might start caring.

--
Jim Pennino

Remove .spam.sux to reply.

797. Re: Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 00:44:55 UTC
From: "Roger (K8RI)" <validaddress@my.com>
Message-ID: <22mpc31v8p7cg67hkc7unrrlq4bfh78krk@4ax.com>
Source record: 37011

On Tue, 21 Aug 2007 17:35:22 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>Jimmie D wrote:
>>>effect on strength or life... I will leave you to think about that.
>>>
>>>In this part of the world, riggers are supposed to inspect working fibre
>>>ropes and condemn rope that is contaminated with paint or any type of
>>>solvent.
>>>
>>>Owen
>>
>>
>> This is especially true of saftey harnesses. During annual harness
>> inspection there is always someone who wrote their name on the harness with
>> a marker.
>> This harness must be condemned.
>>
>> Jimmie
>>
>>
>Isn't that what the tag is for? (a non-structural part that's sewn on
>and write-on-able)

It is and if they are condemning them for that I believe someone is
misinterpreting the regs.

798. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 01:41:08 UTC
From: Larry Benko <xxw0qe@comcast.net>
Message-ID: <FMydnU84g8UyeFHbnZ2dnUVZ_qelnZ2d@comcast.com>
Source record: 37012

Dave Platt wrote:
>
> My understanding is that the popular MFJ antenna analyzers generate
> around 2 volts RMS of RF at their output port. This works out to
> around 80 milliwatts into a 50-ohm load... comparable to what a small
> QRP transmitter would deliver.
>

However my measurements of an MFJ-259B and an MFJ-269 both show constant output throughout the frequency range of +7.0dBm +/- .5dB which is 5mW and not 80mW.

73,
Larry, W0QE

799. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 01:52:46 UTC
From: dplatt@radagast.org
Message-ID: <es5vp4-v0s.ln1@radagast.org>
Source record: 37013

In article <FMydnU84g8UyeFHbnZ2dnUVZ_qelnZ2d@comcast.com>,
Larry Benko <xxw0qe@comcast.net> wrote:

>> My understanding is that the popular MFJ antenna analyzers generate
>> around 2 volts RMS of RF at their output port. This works out to
>> around 80 milliwatts into a 50-ohm load... comparable to what a small
>> QRP transmitter would deliver.

>However my measurements of an MFJ-259B and an MFJ-269 both show constant
>output throughout the frequency range of +7.0dBm +/- .5dB which is 5mW
>and not 80mW.

Interesting - thanks, that's quite a bit lower level than I had
[obviously,mis-]remembered. That'd be about .5 volts RMS rather than
2 volts RMS, IIRC.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

800. Re: Butternut ,9 bands antenna ,Model HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 02:05:53 UTC
From: jwn@yahoo.net
Message-ID: <5gqpc3170sli7rub5ii04h902id0iesh0m@4ax.com>
Source record: 37014

This is a direct quote resultant from a phone call to Bencher.
"The 75 Ohm Matching Line for 20 meter operation (P/N 290-08)
should be from RG-11 75 ohm coax, 11 ft. 4 in. (345.4 cm) if
solid dielectric, 13 ft. 5 in. (411.5 cm) if foam type."

KB4RDV

On Wed, 11 Jul 2007 23:08:16 +0100, Highland Ham
<abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

>A blind radio amateur living in my area got the above antenna installed
>in his garden complete with an off the ground radial system.
>I now try to set-up the system with an MJ 259B analyser ,but I am
>getting nowhere ,because of the following :
>
>There are 2 visual anomalies
>
>1) The inductor between antenna and ground post e.g. across the
>insulator (labelled 'Q' in the Pictorial ,page 14 of manual) is missing.
>
>I know it is a coil of thick enameled wire with a diameter of approx 25
>mm (1 inch) but do not know its inductance .
>So in order to make one myself I would appreciate receiving info re the
>dimensions incl number of turns ,alternatively the required inductance.
>
>2)The antenna kit is normally supplied with a specific length of 75 Ohms
>coaxial cable directly connected across the inductor (see above)
>
>This length of 75 ohms coax is part of the matching system and is to be
>connected to any length of 50 Ohms coax running to the transceiver.
>In the Pictorial ,page 14 of the manual ,this length of 75 Ohms coax is
>identified by 'R'.
>
>However the actual installation shows 1 length of RG-11 (75 Oms) coax
>all the way to the transceiver.
>My obvious question : What is the required length of 75 Ohms coax ?
>
>
>TIA for any relevant info
>
>
>Frank GM0CSZ /KN6WH
>
>(supporting member Radio Invalid and Blind Club, RAIBC, based in the UK)

801. Re: A needed Antenna Item!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 03:28:34 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <C97zi.83285$rX4.56418@pd7urf2no>
Source record: 37015

Jim NN7K wrote:
> Here is a much needed thing for us antenna types!
> See The Bay of "E" for details! Jim
>
> http://cgi.ebay.com/SWRs-BUY-THEM-HERE_W0QQitemZ160148456271QQihZ006QQcategoryZ296QQssPageNameZWDVWQQrdZ1QQcmd%3Cbr%3E%3Cbr%3EZViewItem
>

If the price is right, someone will buy it!
'E-Bay it, and they will come'

Irv VE6BP

802. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 05:58:44 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1187848724.114846.204880@l22g2000prc.googlegroups.com>
Source record: 37016
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna

On Aug 21, 9:48 pm, Stuart Grey <stuart.g...@comcast.net> wrote:
> On Tue, 21 Aug 2007 15:40:00 -0700, Mark Whitlock wrote:
> > On Aug 3, 4:19 pm, Rozagy <Roz...@aol.com> wrote:
>
> >> All the people I know with AS have an official dx by recognised
> >> clinical psychologists specialising in Autism and Asperger's.
> >> Including myself.
> > I have an official DX-4 (486- 133 Mhz). Does that mean I'm autistic ?
>
- It means your antiquetic.

The "what' you say ?

803. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 07:10:40 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46cd32ec$0$18768$4c368faf@roadrunner.com>
Source record: 37017

"Thomas Magma" <somewhere@overtherainbow.com> wrote in message
news:602zi.82535$rX4.27870@pd7urf2no...
> Hi,
>
> I'm trying to determine if using an antenna analyzer is technically a
> violation of the telecommunications Code of Federal Regulations. Typical
> antenna analyzers inject a incident CW or sweeping CW to the antenna and
> measure its return loss (reflection). Very few frequency bands have a CW
> or sweeping CW as their allowed modulation type. The way I see it is that
> by using an antenna analyzer you are intentionally radiating an improper
> modulation type that was allocated for the band and therefore you are in
> violation of the Code of Federal Regulations.
>
> Anyone have any thoughts on this topic?
>
> Thomas Magma
>

It could be if it causes interference, especially if the interference is
done with intent to disrupt communication. This could have a varying degree
of seriousness depending on whether you are trying to disrupt you
neighborhood CBer or jam communications at an airport.

Jimmie

804. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 07:32:21 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1mk5rmzoxm.fsf@persaunet.uninett.no>
Source record: 37018

Michael Coslo <mjc5@psu.edu> writes:

> At any rate, anyone give thoughts to this being just a way to
> get the public utilities to run more fiber, then at a later date, take
> it over commercially and service the rest of us with that?

Interestingly, the only significant provider of fiber to the home in
Norway *is* a power utility company.

73 Jon (LA4RT)

805. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 07:36:32 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1mfy2azoqn.fsf@persaunet.uninett.no>
Source record: 37019

Michael Coslo <mjc5@psu.edu> writes:

> Good heavens guys!
>
> Jon just made a little joke in response to my little joke
> about the oversensitivity of some people to silly things such as BPL
> signals on electric blankets
>
> Instead we have our esteemed members showing their own version
> of oversensitivity. No new age accoutrement needed

I am just a bit oversensitive to new age these days. Some of you may
have noticed what our princess has been up to. For the rest of you:
She's running an expensive seminar about how to talk to
angels. Apparently, no news from Norway has been as widely reported
internationally for years. Embarassing!

Folks, don't ley your daughters play with horses. They might fall off,
head first. This must be what happened to the princess.

73
Jon (LA4RT)

806. Re: Butternut ,9 bands antenna ,Model HF9V

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 08:54:59 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <tomdnXjiY-_R1IDbnZ2dnUVZ8qqlnZ2d@pipex.net>
Source record: 37020

> This is a direct quote resultant from a phone call to Bencher.
> "The 75 Ohm Matching Line for 20 meter operation (P/N 290-08)
> should be from RG-11 75 ohm coax, 11 ft. 4 in. (345.4 cm) if
> solid dielectric, 13 ft. 5 in. (411.5 cm) if foam type."
>
> KB4RDV
==========
Tnx for info , it is much appreciated

Frank GM0CSZ / KN6WH

807. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 09:09:47 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <1K-dnSsl9vhZ01DbRVnyjAA@pipex.net>
Source record: 37021

> Interestingly, the only significant provider of fiber to the home in
> Norway *is* a power utility company.
>
> 73 Jon (LA4RT)
==========
Is that just to Oslo, Bergen , Trondheim and immediate surroundings
or also to the smaller places and rural areas ?

If it is viable for power companies to run fibre to the home in rural
areas BPL will become a non-issue.

Here in Scotland fibre is carried by 425kV system pylons but it is only
used for trunking . However fibre is being installed between telephone
exchanges (by a Tsjech/Slowakian company)

Frank GM0CSZ / KN6WH

808. Re: Rope instead of wire for guys

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 09:11:02 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46cd4f23$0$15359$4c368faf@roadrunner.com>
Source record: 37022

"Roger (K8RI)" <validaddress@my.com> wrote in message
news:22mpc31v8p7cg67hkc7unrrlq4bfh78krk@4ax.com...
> On Tue, 21 Aug 2007 17:35:22 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
> wrote:
>
>>Jimmie D wrote:
>>>>effect on strength or life... I will leave you to think about that.
>>>>
>>>>In this part of the world, riggers are supposed to inspect working fibre
>>>>ropes and condemn rope that is contaminated with paint or any type of
>>>>solvent.
>>>>
>>>>Owen
>>>
>>>
>>> This is especially true of saftey harnesses. During annual harness
>>> inspection there is always someone who wrote their name on the harness
>>> with
>>> a marker.
>>> This harness must be condemned.
>>>
>>> Jimmie
>>>
>>>
>>>Isn't that what the tag is for? (a non-structural part that's sewn on
>>>and write-on-able)
>
> It is and if they are condemning them for that I believe someone is
> misinterpreting the regs.
>

Nope the reg is very clear on this issue though I know it has done no harm
to harness.

The harnesses dont have a sewn on label but we do have some wire on tags
that are applied after inspection.

Jimmie

809. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 09:16:14 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46cd5d33$0$6453$4c368faf@roadrunner.com>
Source record: 37023

"Dave Platt" <dplatt@radagast.org> wrote in message
news:es5vp4-v0s.ln1@radagast.org...
> In article <FMydnU84g8UyeFHbnZ2dnUVZ_qelnZ2d@comcast.com>,
> Larry Benko <xxw0qe@comcast.net> wrote:
>
>>> My understanding is that the popular MFJ antenna analyzers generate
>>> around 2 volts RMS of RF at their output port. This works out to
>>> around 80 milliwatts into a 50-ohm load... comparable to what a small
>>> QRP transmitter would deliver.
>
>>However my measurements of an MFJ-259B and an MFJ-269 both show constant
>>output throughout the frequency range of +7.0dBm +/- .5dB which is 5mW
>>and not 80mW.
>
> Interesting - thanks, that's quite a bit lower level than I had
> [obviously,mis-]remembered. That'd be about .5 volts RMS rather than
> 2 volts RMS, IIRC.

That explains why it didnt work so well as a RX VFO.I needed about 13db I
may try again with a little amp.

810. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 12:56:07 UTC
From: Chuck <no.spam@no.spam.at.all>
Message-ID: <1187873566_5831@sp12lax.superfeed.net>
Source record: 37024

Jimmie D wrote:

> That explains why it didnt work so well as a RX VFO.I needed about 13db I
> may try again with a little amp.
>
>

I wonder if the vacuum tube dip meters
aren't the most powerful signal sources
we typically use to explore antenna
characteristics, especially when the
coil is tightly coupled.

73,
Chuck

----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

811. Re: BPL strikes another win ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 13:45:22 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1m8x82z7nx.fsf@persaunet.uninett.no>
Source record: 37025

Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com> writes:

>> Interestingly, the only significant provider of fiber to the home in
>> Norway *is* a power utility company.
>> 73 Jon (LA4RT)
> ==============================
> Is that just to Oslo, Bergen , Trondheim and immediate surroundings
> or also to the smaller places and rural areas ?

It's mostly smaller places than those, but not really rural.
>
> If it is viable for power companies to run fibre to the home in rural
> areas BPL will become a non-issue.
>
> Here in Scotland fibre is carried by 425kV system pylons but it is
> only used for trunking .

This is how the power companies got involved in the business here as
well. But one in particular (www.lyse.no) has expanded into consumer
access.

812. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 13:46:29 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1m4piqz7m2.fsf@persaunet.uninett.no>
Source record: 37026

"Jimmie D" <GFENDER@carolina.rr.com> writes:

> That explains why it didnt work so well as a RX VFO.I needed about 13db I
> may try again with a little amp.

If you listen to the signal, it's quite unstable. So probably not very
useful as a VFO.

813. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 14:02:50 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46cd9387$0$28841$4c368faf@roadrunner.com>
Source record: 37027

"Jon K�re Hellan" <dev@null.com> wrote in message
news:1m4piqz7m2.fsf@persaunet.uninett.no...
> "Jimmie D" <GFENDER@carolina.rr.com> writes:
>
>> That explains why it didnt work so well as a RX VFO.I needed about 13db I
>> may try again with a little amp.
>
> If you listen to the signal, it's quite unstable. So probably not very
> useful as a VFO.

I just wanted it for test puposes to check out a receiver Ive been working on for 4 or 5 years. I think the osc on it may be weak too.

Jimmie

814. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 14:08:55 UTC
From: johannes <johs@size-nospamme87432-fitter.com>
Message-ID: <46CD94F6.43CAE06@size-nospamme87432-fitter.com>
Source record: 37028
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

Mark Whitlock wrote:
>
> On Aug 3, 4:19 pm, Rozagy <Roz...@aol.com> wrote:
>
> > All the people I know with AS have an official dx by recognised
> > clinical psychologists specialising in Autism and Asperger's.
> > Including myself.
> I have an official DX-4 (486- 133 Mhz). Does that mean I'm autistic ?
>
> Mark.

Ahh.. but it was really a DX-3, but Intel named it DX-4. Does this
mean I'm acaustic?

815. kernerls

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 14:55:58 UTC
From: gor54567gy@mail-dot-ru.no-spam.invalid
Message-ID: <1187880958_5857@sp12lax.superfeed.net>
Source record: 37029

Gru?schreiben

ephedrine
http://ephedrine-cheap-order-3.blogspot.com/

dire au revoir

-------------= Posted from Ugroups.com =-------------
---= Fast & Free Web Portal to Usenet Newsgroups =---
-------------= http://www.ugroups.com/ =-------------

816. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 16:11:10 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1187885470.380065.121700@x40g2000prg.googlegroups.com>
Source record: 37030
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna

On Aug 23, 7:08 am, johannes <j...@size-nospamme87432-fitter.com>
wrote:
> Mark Whitlock wrote:
>
> > On Aug 3, 4:19 pm, Rozagy <Roz...@aol.com> wrote:
>
> > > All the people I know with AS have an official dx by recognised
> > > clinical psychologists specialising in Autism and Asperger's.
> > > Including myself.
> > I have an official DX-4 (486- 133 Mhz). Does that mean I'm autistic ?
>
> > Mark.
>
> Ahh.. but it was really a DX-3, but Intel named it DX-4. Does this
> mean I'm acaustic?

DUH-X-3 ? or DUH-X-4 ? means you are DUH-tistic !
- - - Once Again You Have Been "Radium"ed . . .

817. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 16:19:01 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <Vrizi.84615$rX4.45164@pd7urf2no>
Source record: 37031

>> A network analyzers is not marketed as an antenna analyzer, or even an
>> intentional radiator for that matter. I have a signal generator, an
>> amplifier and an antenna in my lab but it does not mean I can sweep the
>> entire LF to UHF bands at any wattage.
>
> Then you need to get a better signal generator.
>

I meant "does not mean I can legally sweep the entire LF to UHF bands"

>
>> I was just looking through Part 18 and it really is unclear to me,
>> however
>> one thing was clear to me, ISM devices are prohibited for use in certain
>> bands. One of which is search and rescue. So now how can I test my ELT
>> antenna installation on my aircraft if I'm violating FCC rules?
>
> You test it during the time window when testing ELT's is allowed.
>

This does not apply to the newer 406 ELT's that are currently being sold,
and which are monitored by very sensitive LEO, MEO and GEO satellites. A
band that is also recognized and protected by the ITU.

818. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 16:30:45 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <VCizi.84625$rX4.43011@pd7urf2no>
Source record: 36932

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:13cpjdjt7vofh77@corp.supernews.com...
> Thomas you can start around here in the Part 15 rules.
>
>
> [Code of Federal Regulations]
> [Title 47, Volume 1, Parts 0 to 19]
> [Revised as of October 1, 2000]
> From the U.S. Government Printing Office via GPO Access
> [CITE: 47CFR15.3]
>
> [Page 676-679]
>
> TITLE 47--TELECOMMUNICATION
>
> CHAPTER I--FEDERAL COMMUNICATIONS COMMISSION
>
> PART 15--RADIO FREQUENCY DEVICES--Table of Contents
>
> Subpart A--General
>
> Sec. 15.3 Definitions.
>
>
> (dd) Test equipment is defined as equipment that is intended
> primarily for purposes of performing measurements or scientific
> investigations. Such equipment includes, but is not limited to, field
> strength meters, spectrum analyzers, and modulation monitors.
>

Thanks Ralph,

I have the CRF in front of me and can see where test equipment is defined.
However, I can seem to find where it says that test equipment is exempt from
any sort of intentional radiation at any power levels.

Do you know where?

Thomas

819. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 16:46:04 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <gRizi.83913$fJ5.72889@pd7urf1no>
Source record: 36933

> And for the nitpickers, yes if you hooked one to an antenna and left
> it turned on for days, someone might start caring.
>

Hi Jim,

I'm not necessarily worried about interfering, disrupting or jamming other receivers in the area, a fast sweeping 3 or 7 dbm CW would not likely interfere. I am worried about what is legal and what is not legal. Regulatory bodies such as the FCC/ITU do not use statements or issue licenses under terms 'it's not likely to' or 'its not much of a concern', they prefer to issue specific modulation types and field strengths.

Thomas

820. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 17:09:35 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <jbjzi.83928$fJ5.25636@pd7urf1no>
Source record: 36934

> I have the CRF in front of me and can see where test equipment is defined.
> However, I can seem to find where it says that test equipment is exempt
> from any sort of intentional radiation at any power levels.

"I can't seem to find"...that is...

821. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 17:22:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <uhfrc311li1g61mnin96mgv4c9e9esqtk6@4ax.com>
Source record: 36935

On Thu, 23 Aug 2007 16:46:04 GMT, "Thomas Magma"
<somewhere@overtherainbow.com> wrote:

> I am worried about what is legal and what is not legal.

Hi Thomas,

Then sifting legal advice from ad-hoc postings is a poor remedy for
worry.

73's
Richard Clark, KB7QHC

822. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 17:30:17 UTC
From: The Shadow <Repose@Zilch.com>
Message-ID: <Mujzi.94306$kK1.587@newsfe14.phx>
Source record: 36936

> On Thu, 23 Aug 2007 16:46:04 GMT, "Thomas Magma"
> <somewhere@overtherainbow.com> wrote:
>
>> I am worried about what is legal and what is not legal.
>

If worried, write the FCC for clarification

Lots of folks here are guessing --- IMHO

Lamont

823. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 18:27:55 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1187893675.325309.71420@x40g2000prg.googlegroups.com>
Source record: 36937

We have had regulation of RF emissions since 1912... I have been an
active ham for 45 years... I have read most of the back issues of QST
over the years, clear back to the start.... I keep up (mostly) with
regulatory and enforcement actions that affect hams....
Never, ever, have I run across an action by the FCC against a ham for
using a piece of test gear that radiates low power signals...
When that does happen perhaps it will be time to discuss it...

denny / k8do

824. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 18:59:05 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <QZNUreJ5jdzGFwJ7@g3ohx.demon.co.uk>
Source record: 36938

In message <Mujzi.94306$kK1.587@newsfe14.phx>, The Shadow
<Repose@Zilch.com> writes
>
>
>> On Thu, 23 Aug 2007 16:46:04 GMT, "Thomas Magma"
>> <somewhere@overtherainbow.com> wrote:
>>
>>> I am worried about what is legal and what is not legal.
>>
>
>If worried, write the FCC for clarification
>
>Lots of folks here are guessing --- IMHO
>
>Lamont

Asking for clarification is absolutely the last thing you want to do.
Have you never heard of 'Let sleeping dogs lie'? Most authorities (at
least in the UK) have a policy of "If in doubt, say no". Alternatively,
the response may come from some junior employee who has no idea what you
are talking about, and in case he/she is wrong, will simply give an
unconsidered "No" as a 'safe' answer.
--
Ian

825. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 19:59:05 UTC
From: Thomas Magma <somewhere@overtherainbow.com>
Message-ID: <dGlzi.84070$fJ5.16631@pd7urf1no>
Source record: 36939

>> I am worried about what is legal and what is not legal.
>
> Hi Thomas,
>
> Then sifting legal advice from ad-hoc postings is a poor remedy for
> worry.
>

I agree with you, however this is not the intelligent answer I was looking for.

I like to think there are people that participate in certain newsgroups that are more knowledgeable on specific topics than I am. If I start asking questions to the FCC or ITU it will be a huge drawn out process. I was hoping someone knew the answer so I wouldn't have to go that route.

Thomas

826. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 20:19:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <85qrc3pnnhq6se0ns80uvmv3bpht0dkunu@4ax.com>
Source record: 36940

On Thu, 23 Aug 2007 19:59:05 GMT, "Thomas Magma"
<somewhere@overtherainbow.com> wrote:

>>> I am worried about what is legal and what is not legal.
>>
>> Hi Thomas,
>>
>> Then sifting legal advice from ad-hoc postings is a poor remedy for
>> worry.
>>
>
>I agree with you, however this is not the intelligent answer I was looking
>for.

Hi Thomas,

I hesitated to jump in at:
On Wed, 22 Aug 2007 23:47:22 GMT, "Thomas Magma"
<somewhere@overtherainbow.com> wrote:
>So now how can I test my ELT
>antenna installation on my aircraft if I'm violating FCC rules?

Where the intelligent response would have been "What about FAA rules
or CFR 91.207(2)(d)(4) (where you would struggle to qualify as an
inspector)?"

As I have been authorized to work under both authorities (I've done
plenty of Navigation Aids, transmitters and Flight Recorders) that
particular question seemed to evidence a struggle in the tarpits.

73's
Richard Clark, KB7QHC

827. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 20:48:02 UTC
From: The Shadow <Repose@Zilch.com>
Message-ID: <Domzi.87919$TW6.60943@newsfe06.phx>
Source record: 36941

"Thomas Magma" <somewhere@overtherainbow.com> wrote in message
news:dGlzi.84070$fJ5.16631@pd7urf1no...
>>> I am worried about what is legal and what is not legal.
>>
>> Hi Thomas,
>>
>> Then sifting legal advice from ad-hoc postings is a poor remedy for
>> worry.
>>
>
> I agree with you, however this is not the intelligent answer I was looking
> for.
>
> I like to think there are people that participate in certain newsgroups
> that are more knowledgeable on specific topics than I am. If I start
> asking questions to the FCC or ITU it will be a huge drawn out process. I
> was hoping someone knew the answer so I wouldn't have to go that route.
>
> Thomas
>

Au contraire. In the past I have queried the FCC on a number of issues and
received prompt and definitive replies. Doing thus gives you the FCC stance
on the issue -- not the News Group guesses

Lamont

828. vertical with semicircle of radials

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 21:06:10 UTC
From: "R.K. AJ4BF" <none@dev.nul>
Message-ID: <230820071706105637%none@dev.nul>
Source record: 36942

What is the effect of having a semi-circle of radials beneath a vertical antenna instead of a complete circle? For example if your vertical is near a property line. I vaguely remember reading that the azimuth pattern would no longer be omni-directional and there would be a change in the elevation of the main lobe. But my memory is hazy and I can't find anything on the web.

829. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 22:14:52 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1187907292.737462.125010@e9g2000prf.googlegroups.com>
Source record: 36943
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

On Aug 21, 7:40 pm, Mark Whitlock <ma...@leadmon.net> wrote:
> On Aug 3, 4:19 pm, Rozagy <Roz...@aol.com> wrote:
>
> > All the people I know with AS have an official dx by recognised
> > clinical psychologists specialising in Autism and Asperger's.
> > Including myself.
>
> I have an official DX-4 (486- 133 Mhz). Does that mean I'm autistic ?
>
> Mark.

No, it probably means that you have downs.

830. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-23 22:18:47 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fal148$m8g$1@news.jpl.nasa.gov>
Source record: 36944

Denny wrote:
> We have had regulation of RF emissions since 1912... I have been an
> active ham for 45 years... I have read most of the back issues of QST
> over the years, clear back to the start.... I keep up (mostly) with
> regulatory and enforcement actions that affect hams....
> Never, ever, have I run across an action by the FCC against a ham for
> using a piece of test gear that radiates low power signals...

Perhaps not against hams, but cases of FCC enforcement actions against commercial users of test equipment have occurred. A typical case is radiating on an antenna test range with a bit too much power, or without the necessary experimental Part 5 license. There are also cases of companies getting tagged for doing things like testing a radar, but that's something designed to radiate, not a piece of test gear.

The general rule is, if they can't detect it at the property line, you're probably legal.

831. Source for large #31 toroids

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 00:36:13 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <%Jpzi.135$H91.36@newsfe12.lga>
Source record: 36945

Where is a reasonable source for a small number of 2.4 inch #31 toroids?

Various catalogs list #43 in this size, but I cannot find #31.

The 160/80m choke described in K9YC's paper sounds good. I expect getting 7 turns of RG213 or "buryflex" through these toroids might be an interesting exercise.

Bill - W2WO

832. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 01:01:27 UTC
From: an_old_friend <konstans@hotmail.com>
Message-ID: <1187917287.387741.42730@x35g2000prf.googlegroups.com>
Source record: 36946
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna,rec.radio.shortwave

On Aug 23, 6:14 pm, hot-ham-and-che...@hotmail.com wrote:
> On Aug 21, 7:40 pm, Mark Whitlock <ma...@leadmon.net> wrote:
>
> > On Aug 3, 4:19 pm, Rozagy <Roz...@aol.com> wrote:
>
> > > All the people I know with AS have an official dx by recognised
> > > clinical psychologists specialising in Autism and Asperger's.
> > > Including myself.
>
> > I have an official DX-4 (486- 133 Mhz). Does that mean I'm autistic ?
>
> > Mark.
>
> No, it probably means that you have downs.

unkind but sadly approprate

833. Re: OT Message: My Disability

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 01:10:10 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1187917810.541138.92320@i38g2000prf.googlegroups.com>
Source record: 36947
Cross-posted to: comp.sys.ibm.pc.hardware.chips,misc.survivalism,alt.survival,rec.radio.amateur.antenna

On Aug 23, 6:01 pm, an_old_friend <konst...@hotmail.com> wrote:
> On Aug 23, 6:14 pm, hot-ham-and-che...@hotmail.com wrote:
>
> > On Aug 21, 7:40 pm, Mark Whitlock <ma...@leadmon.net> wrote:
>
> > > On Aug 3, 4:19 pm, Rozagy <Roz...@aol.com> wrote:
>
> > > > All the people I know with AS have an official dx by recognised
> > > > clinical psychologists specialising in Autism and Asperger's.
> > > > Including myself.
>
> > > I have an official DX-4 (486- 133 Mhz). Does that mean I'm autistic ?
>
> > > Mark.
>
> > No, it probably means that you have downs.
>
- unkind but sadly approprate

DOH ! kindly un-cross-post before replying DOH !

834. Re: Source for large #31 toroids

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 01:17:00 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <29csc35oi49g7qb82vnkfvntgoijgtmk61@4ax.com>
Source record: 36948

On Thu, 23 Aug 2007 20:36:13 -0400, "Bill Ogden"
<wogden@attglobal.net> wrote:

>Where is a reasonable source for a small number of 2.4 inch #31 toroids?
>
>Various catalogs list #43 in this size, but I cannot find #31.
>
>The 160/80m choke described in K9YC's paper sounds good. I expect getting 7
>turns of RG213 or "buryflex" through these toroids might be an interesting
>exercise.
>
>Bill - W2WO

I've purchased mine from Amidon.

http://www.amidoncorp.com/

Danny, K6MHE

>

835. Re: vertical with semicircle of radials

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 09:49:12 UTC
From: Wimpie <wimtel@tetech.nl>
Message-ID: <1187948952.779056.292480@x35g2000prf.googlegroups.com>
Source record: 36949

On 23 ago, 23:06, "R.K. AJ4BF" <n...@dev.nul> wrote:
> What is the effect of having a semi-circle of radials beneath a
> vertical antenna instead of a complete circle? For example if your
> vertical is near a property line. I vaguely remember reading that the
> azimuth pattern would no longer be omni-directional and there would be
> a change in the elevation of the main lobe. But my memory is hazy and I
> can't find anything on the web.

Hello,

When your radiator is about a halve wave (or multiple of), the azimuth
radiation pattern is mainly determined by the radiator (as current fed
to radial network is far below the current in the radiator).

I assume that you radials are close to the ground or touching the
ground (soil).
In case of shorter antennas, current in the radials will be
significant. In that case you are right, the azimuth pattern will no
longer be circular. There will be more radiation in a direction
opposite to where are no radials. I believe that you will not notice
the difference between semi circular or full circular radial network
because of directivity.

Regarding elevation pattern, the soil properties will be dominant. So
I would not worry about your ground network.

The real part of the ground impedance will be higher (with respect to
a full star configuration), so depending on the radiation resistance
of you vertical, the radiation efficiency may be lower.

Best regards,

Wim
PA3DJS
www.tetech.nl

836. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 11:10:54 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1187953854.161004.206950@q4g2000prc.googlegroups.com>
Source record: 36950

>
> Perhaps not against hams, but cases of FCC enforcement actions against
> commercial users of test equipment have occurred.

Jim, I am a pilot, etc. I am aware of enforcement actions against radio repair stations for radiating excessive power on the same frequency as the VOR on the field, etc... But, I was very specific in my comments... No enforcement action against a ham for using test equipment - ever - insofar as I know... This is so unlikely as to equal betting on the Megamillions Lottery this weekend, for several reasons... The first reason is that we are licensed to radiate those emissions in the first place... The second reason is that unintentional interference must be accepted in the ham bands per the regulations... The third is, Rily has a sense of humor...

73 - denny

837. Re: Source for large #31 toroids

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 13:41:55 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <DeBzi.9$az5.1@newsfe12.lga>
Source record: 36951

Thank you. I did not see it in their listings, but I will now assume they
have these toroids.

Bill
W2WO

"Danny Richardson" <n_group@k6mhe.com> wrote in message
news:29csc35oi49g7qb82vnkfvntgoijgtmk61@4ax.com...
> On Thu, 23 Aug 2007 20:36:13 -0400, "Bill Ogden"
> <wogden@attglobal.net> wrote:
>
>>Where is a reasonable source for a small number of 2.4 inch #31 toroids?
>>
>>Various catalogs list #43 in this size, but I cannot find #31.
>>
>>The 160/80m choke described in K9YC's paper sounds good. I expect getting
>>7
>>turns of RG213 or "buryflex" through these toroids might be an
>>interesting
>>exercise.
>>
>>Bill - W2WO
>
> I've purchased mine from Amidon.
>
> http://www.amidoncorp.com/
>
> Danny, K6MHE
>
>
>>
>

838. Re: Source for large #31 toroids

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 14:19:24 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <LNBzi.987$YQ.879@nlpi061.nbdc.sbc.com>
Source record: 36952

Bill Ogden wrote:
> Thank you. I did not see it in their listings, but I will now assume they
> have these toroids.

The Fair-Rite link will take you to #31 material.

http://www.fair-rite.com/
--
73, Cecil http://www.w5dxp.com

839. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 14:30:25 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <famq29$17ra$1@f04n12.cac.psu.edu>
Source record: 36953

Thomas Magma wrote:
>>> I am worried about what is legal and what is not legal.
>> Hi Thomas,
>>
>> Then sifting legal advice from ad-hoc postings is a poor remedy for
>> worry.
>>
>
> I agree with you, however this is not the intelligent answer I was looking
> for.

Why? Are you seriously worried about getting arrested for using an antenna analyzer?

It's really time to step back and take a deep breath, Thomas. If you can get wrapped around the axle about this non-issue, there are plenty more legalistic pitfalls in amateur radio to give you an ulcer.

> I like to think there are people that participate in certain newsgroups that
> are more knowledgeable on specific topics than I am.

If what you are looking for is specific written words blessing the use of antenna analyzers, I doubt that such a thing exists. Then again, I haven't looked for anything either. People have been sending tiny amounts of RF up their antennas to find out things about it since before Methuselah, selling and buying instruments of apparent contraband without anyone getting too excited. 'Til now.

Respectfully suggest that you start looking for your evidence. Most of us are happy to assume that when used for the intended purpose, an antenna analyzer is legal and acceptable. If you think it might not be - and I have to assume that you do, do the research and prove it.

That's my answer. You can decide if it is intelligent or not ;^)

> If I start asking
> questions to the FCC or ITU it will be a huge drawn out process. I was
> hoping someone knew the answer so I wouldn't have to go that route.

It might make for part of Riley's speech at Dayton next year... ;^)

- 73 de Mike KB3EIA -

840. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 14:43:33 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <famqql$1i58$1@f04n12.cac.psu.edu>
Source record: 36954

Denny wrote:
>> Perhaps not against hams, but cases of FCC enforcement actions against
>> commercial users of test equipment have occurred.
>
> Jim, I am a pilot, etc. I am aware of enforcement actions against
> radio repair stations for radiating excessive power on the same
> frequency as the VOR on the field, etc... But, I was very specific in
> my comments... No enforcement action against a ham for using test
> equipment - ever - insofar as I know... This is so unlikely as to
> equal betting on the Megamillions Lottery this weekend, for several
> reasons... The first reason is that we are licensed to radiate those
> emissions in the first place... The second reason is that
> unintentional interference must be accepted in the ham bands per the
> regulations... The third is, Rily has a sense of humor...

As Homer Simpson once mused:

"Can God Make a Burrito that is too hot for him to eat?"

It was a well deserved citation against that radio repair station. And the antenna range too. But neither of those are the same issue.

But since we have descended from the sublime into the ridiculous, I have noted that it is occasionally possible to accidentally make a QSO with another OP while connected to a dummy load. I've done this a number of times on PSK31.

Are there specific rules and limits to the radiation from dummy loads? And if not, are Dummy loads illegal?

- 73 de Mike KB3EIA -

841. Cushcraft Vertical Trap Consistency - Is there a trick guys?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 14:45:07 UTC
From: Kevin Hastings <myfamilydotcom@hotmail.com>
Message-ID: <46ceeefb$0$4068$9a566e8b@news.aliant.net>
Source record: 36955

I've spent 2 months or so of tweaking an older Cushcraft ATV-5 5-band vertical with a friend's MFJ analyser and have had this thing exactly where I want it several times now. After tightening things down and putting vinyl electrical tape on all traps and section joints (where it seemed to make sense) it would look fine for a few days to a week.

Then the resonant points of some bands would shift up to no-man's band seemingly overnight and stay there. I suspected poor screw conections at the traps, and so have been adding a stainless steel pipe-clamp connection just above and below the trap for improved connection. Made things better I thought - now 1-2 bands are just out of whack again.

There's always moisture inside the trap when I disassemble the thing, so I'm wondering if maybe I shouldn't be trying to tape up the traps at all - maybe they are retaining water or something that is affecting the capacitance. Each trap has a drain hole at the bottom, and the aliminium pole itself has drain holes every now and then that I'm trying not to interfere with.

Is there a trick, or some practical experience here that you can share?

I've had a lot of fun experimenting with this in any case, but winter's coming...

Thanks,

Kevin VE9-XYZ
myfamilydotcom@hotmail.com

842. Re: vertical with semicircle of radials

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 14:51:41 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <famr9t$17qu$1@f04n12.cac.psu.edu>
Source record: 36956

R.K. AJ4BF wrote:
> What is the effect of having a semi-circle of radials beneath a
> vertical antenna instead of a complete circle? For example if your
> vertical is near a property line. I vaguely remember reading that the
> azimuth pattern would no longer be omni-directional and there would be
> a change in the elevation of the main lobe. But my memory is hazy and I
> can't find anything on the web.

It will have some effect, but less than you might think. I put up a vertical on one side of my yard, and put in a set of radials that were as long as I could get them in every direction. Some of them aren't perfectly radial either, there is the occasional bend in some of them.

It's one of those things that if possible, they should be arranged in a perfect radial pattern all around the antenna. But as Hams, we don't always have the chance to have things perfect.

I would say that if you could get some short radials down in the deficient direction it would be best, but if not, put it up anyway and have some fun.

- 73 de Mike KB3EIA -

843. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 16:46:55 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <e72uc3920roulhe6n9qc5vm9nah6jjdghb@4ax.com>
Source record: 36957

On Wed, 22 Aug 2007 21:37:06 GMT, "Thomas Magma"
<somewhere@overtherainbow.com> wrote:

>Hi,
>
>I'm trying to determine if using an antenna analyzer is technically a
>violation of the telecommunications Code of Federal Regulations. Typical
>antenna analyzers inject a incident CW or sweeping CW to the antenna and
>measure its return loss (reflection). Very few frequency bands have a CW or
>sweeping CW as their allowed modulation type. The way I see it is that by
>using an antenna analyzer you are intentionally radiating an improper
>modulation type that was allocated for the band and therefore you are in
>violation of the Code of Federal Regulations.
>
>Anyone have any thoughts on this topic?
>
>Thomas Magma
>

I have an Oak Hills Research WM-2 QRP Wattmeter, which includes a
0-100 milliwatt scale.

With an MFJ 269 Antenna Analyzer hooked to the transmitter side of the
wattmeter, and an MFJ dummy load hooked to the load side of the
wattmeter, I get a reading of 3 milliwatts forward, 0 milliwatts
reflected.

Not sure whether the FCC is concerned with signals at the 3 milliwatt
level...

Bob
k5qwg

844. Re: Cushcraft Vertical Trap Consistency - Is there a trick guys?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 16:58:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ne3uc3lcu8jleigpd8h4cgks6h9d2tiao4@4ax.com>
Source record: 36958

On Fri, 24 Aug 2007 11:45:07 -0300, "Kevin Hastings"
<myfamilydotcom@hotmail.com> wrote:

>Is there a trick, or some practical experience here that you can share?

Hi Kevin,

Is this an elevated vertical, or ground mounted?

If elevated, do you have the transmission line choked at the
feedpoint?

If ground mounted, what kind of radials system do you have?

73's
Richard Clark, KB7QHC

845. Determining Ham-M series 1 or 2 from series 3-5

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 17:07:50 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.24.17.07.49.306194@from.qrz.com>
Source record: 36959

On Sun, 12 Aug 2007 21:32:24 -0500, gb wrote:

> Just go to Norm's Rotor Service FAQ
> http://www.rotorservice.com/faqs.htm
>
> 14. Can I use a Ham-2 rotor control box with my T2X rotor? Are the Ham-2,
> Ham-3, Ham-4 and T2X control boxes interchangeable?
> Yes, for the most part, all of the 8-wire rotors except for the TR-2 series
> are interchangeable. You can use a TR-44 series 3; Ham-M series 3, 4, or 5;
> CD-44/Ham-2; CD-44/Ham-3; Ham-4; or T2X control unit with any of the listed
> rotors or vice versa. However, the Ham-M and TR-44 series 1 and 2 rotors
> were wired differently and are not interchangeable with anything else. So,
> trying to use a series 1 or 2 control on a newer rotor will destroy the
> rotor pot instantly.
>
> To be sure that you have one of the interchangeable controls, verify that
> the motor start capacitor is across terminals 4 and 8. To verify that the
> rotor is one of the interchangeable models, look for the 500-ohm pot
> resistance across terminals 3 and 7. If your rotor and control unit pass
> these inspections, they are interchangeable with others which also pass.

Is there a way to tell the difference between series 1-2 and series 3-5
without taking the rotor apart?

I already took the rotor apart once, to try to find some identifying marks
on it to differentiate between Ham-M and Ham-II-IV, and had one hell of a
time getting it back together... ended losing about four of the ball
bearings, then when the XYL asked what I was doing crawling around on the
floor and cursing and I showed her what I was looking for she disappeared
and came back in a few minutes with a small bowl full of ball bearings and
said "Will any of these fit?". Sure enough, they were the EXACT size.

Still had an awful time getting it back together though and I really don't
want to do it again.

So, if there is a way ... perhaps some measurements I can take with an
ohmmeter ... that will show me if I have a series 1-2 or series 3-5 that
would be a great help.

Thanks...

846. Re: Cushcraft Vertical Trap Consistency - Is there a trick guys?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 17:15:05 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <xmEzi.137495$zz2.117193@newsfe12.phx>
Source record: 36960

"Kevin Hastings" <myfamilydotcom@hotmail.com> wrote in message
news:46ceeefb$0$4068$9a566e8b@news.aliant.net...
> I've spent 2 months or so of tweaking an older Cushcraft ATV-5 5-band
> vertical with a friend's MFJ analyser and have had this thing exactly
> where I want it several times now. After tightening things down and
> putting vinyl electrical tape on all traps and section joints (where it
> seemed to make sense) it would look fine for a few days to a week.
>
> Then the resonant points of some bands would shift up to no-man's band
> seemingly overnight and stay there. I suspected poor screw conections at
> the traps, and so have been adding a stainless steel pipe-clamp connection
> just above and below the trap for improved connection. Made things better
> I thought - now 1-2 bands are just out of whack again.
>
> There's always moisture inside the trap when I disassemble the thing, so
> I'm wondering if maybe I shouldn't be trying to tape up the traps at all -
> maybe they are retaining water or something that is affecting the
> capacitance. Each trap has a drain hole at the bottom, and the aliminium
> pole itself has drain holes every now and then that I'm trying not to
> interfere with.
>
> Is there a trick, or some practical experience here that you can share?
>
> I've had a lot of fun experimenting with this in any case, but winter's
> coming...
>
> Thanks,
>
> Kevin VE9-XYZ
> myfamilydotcom@hotmail.com
>
>

Kevin my Cushcraft (MushCraft (;-) R-7000 had a similiar problem. The trap wires are aluminum and connect to the trap shell where a intermittent connection would occur. Using a slightly larger screw and a star washer cured the problem. Don't know if this applies to your ATV-5 or not.

Lamont

847. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 17:51:17 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <pUEzi.4308$Oo.525@newssvr17.news.prodigy.net>
Source record: 36961

Michael Coslo wrote:
> People have been sending tiny
> amounts of RF up their antennas to find out things about it since before
> Methuselah, ...

Mike, do you really think the Nephilim were people?
--
73, Cecil http://www.w5dxp.com

848. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 18:58:25 UTC
From: Bruce in Alaska <bruceg@btpost.net>
Message-ID: <bruceg-BFF15D.10592024082007@netnews.worldnet.att.net>
Source record: 36962

In article <famqql$1i58$1@f04n12.cac.psu.edu>,
Michael Coslo <mjc5@psu.edu> wrote:

> But since we have descended from the sublime into the ridiculous, I have
> noted that it is occasionally possible to accidentally make a QSO with
> another OP while connected to a dummy load. I've done this a number of
> times on PSK31.
>
> Are there specific rules and limits to the radiation from dummy loads?
> And if not, are Dummy loads illegal?
>
> - 73 de Mike KB3EIA -

It IS possible to radiate from a Dummy Load, enough energy to commuicate
with another station. Example. Years ago, I was a Traveling Radioman
for the old Northern Radio Company of Seattle, Washington. I had a
Northern N550 MF/HF SSB 150W PEP Transceiver on the testbench connected
to a Bird 1 Kw Dummy Load. I was doing a final tuneup on the
Transmitter, which was Crystal Controlled, and one of the channels was
KMI @ Point Reyes California, the AT&T HighSeas HF Station for the
Pacific. As I was testing with a two tone Audio Test Signal, I heard
the KMI Operator come back with a "Who the heck is on my input Freq
on KMI-1201?". We carried on a nice chat for about 5 minutes, and I
called him on the Landline after that for another 30 minute chat. He
said he routinely got signals from Radio Shops, doing tuneups on
his Calling and Working Frequencies, when the Band was Wide Open.
His Receiving Antenna Array was a set of Phased Rhombics, steerable
over a 270 degree Arc to the West.

Bruce in alaska AL7AQ ex-FCC Field Inspector for Alaska
--
add a <2> before @

849. Re: Cushcraft Vertical Trap Consistency - Is there a trick guys?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 19:40:05 UTC
From: John Passaneau <w3jxp@arrl.net>
Message-ID: <Xns99969F6629BF3jxp16psuedu@128.118.141.40>
Source record: 36963

"Kevin Hastings" <myfamilydotcom@hotmail.com> wrote in
news:46ceeefb$0$4068$9a566e8b@news.aliant.net:

> I've spent 2 months or so of tweaking an older Cushcraft ATV-5 5-band
> vertical with a friend's MFJ analyser and have had this thing exactly
> where I want it several times now. After tightening things down and
> putting vinyl electrical tape on all traps and section joints (where
> it seemed to make sense) it would look fine for a few days to a week.
>
> Then the resonant points of some bands would shift up to no-man's band
> seemingly overnight and stay there. I suspected poor screw conections
> at the traps, and so have been adding a stainless steel pipe-clamp
> connection just above and below the trap for improved connection. Made
> things better I thought - now 1-2 bands are just out of whack again.
>
> There's always moisture inside the trap when I disassemble the thing,
> so I'm wondering if maybe I shouldn't be trying to tape up the traps
> at all - maybe they are retaining water or something that is affecting
> the capacitance. Each trap has a drain hole at the bottom, and the
> aliminium pole itself has drain holes every now and then that I'm
> trying not to interfere with.
>
> Is there a trick, or some practical experience here that you can
> share?
>
> I've had a lot of fun experimenting with this in any case, but
> winter's coming...
>
> Thanks,
>
> Kevin VE9-XYZ
> myfamilydotcom@hotmail.com
>
>

Hi Kevin:

Don't cover up the vent holes. Water is a poor dielectric and will de-
tune the traps. Also it will promote corrosion.

John Passaneau W3JXP

850. Re: Cushcraft Vertical Trap Consistency - Is there a trick guys?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 19:48:05 UTC
From: Kevin Hastings <myfamilydotcom@hotmail.com>
Message-ID: <46cf3600$0$4051$9a566e8b@news.aliant.net>
Source record: 36964

Richard - this is ground mounted. with 15 radials as specified in the manual - and when it works - it works well. Very low SWR and no RF in the shack. But the traps change characteristics I guess.

Kevin

> Hi Kevin,
>
> Is this an elevated vertical, or ground mounted?
>
> If elevated, do you have the transmission line choked at the
> feedpoint?
>
> If ground mounted, what kind of radials system do you have?
>
> 73's
> Richard Clark, KB7QHC

851. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 21:10:14 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <_OHzi.1001$L_7.722@newsfe16.phx>
Source record: 36965

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:fanaju$17vk$1@f04n12.cac.psu.edu...
> Cecil Moore wrote:
>> Michael Coslo wrote:
>>> People have been sending tiny amounts of RF up their antennas to find
>>> out things about it since before Methuselah, ...
>>
>> Mike, do you really think the Nephilim were people?
>
> I guess it depned on whther you thing they were descended from the
> begatten of Seth and Cain or the Anakim.
>
> I wonder if they used an antenna analyzer on the Ark??

Nope the Doves had Radar (;-)
Lamont

852. Re: Cushcraft Vertical Trap Consistency - Is there a trick guys?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 22:36:56 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <DaadnRw-m4PkwFLbnZ2dnUVZ8qydnZ2d@pipex.net>
Source record: 36966

Kevin Hastings wrote:
> I've spent 2 months or so of tweaking an older Cushcraft ATV-5 5-band
> vertical with a friend's MFJ analyser and have had this thing exactly where
> I want it several times now. After tightening things down and putting vinyl
> electrical tape on all traps and section joints (where it seemed to make
> sense) it would look fine for a few days to a week.
>
> Then the resonant points of some bands would shift up to no-man's band
> seemingly overnight and stay there. I suspected poor screw conections at
> the traps, and so have been adding a stainless steel pipe-clamp connection
> just above and below the trap for improved connection. Made things better I
> thought - now 1-2 bands are just out of whack again.
>
> There's always moisture inside the trap when I disassemble the thing, so I'm
> wondering if maybe I shouldn't be trying to tape up the traps at all - maybe
> they are retaining water or something that is affecting the capacitance.
> Each trap has a drain hole at the bottom, and the aliminium pole itself has
> drain holes every now and then that I'm trying not to interfere with.
>
> Is there a trick, or some practical experience here that you can share?
>
> I've had a lot of fun experimenting with this in any case, but winter's
> coming...
==========
Earlier this week I have done a similar exercise with a Butternut HF9V
vertical, using a MFJ259B analyser. Initially I got nowhere,although
nothing was 'visibly' wrong.
However ,when stripping the antenna I found that because of dissimilar
metal corrosion (stainless steel bolts,nuts and washers to aluminium
tubing) a white aluminium oxyde powder had developed in between the
stainless steel / aluminium contact areas . Following removal of this
and re-fitting all components the antenna can now be adjusted and tuned.
Sofar ,80 metres and 17metres are fine (SWR is around 1.5 : 1) ,the
other bands still to be done. When finished I'll cover all the spots
with above contact areas with (Finnigan's Wax Oil)
This wax oil is widely available in the UK and is primarily meant to
protect the chassis of cars . It is also very suitable for protecting
metal components of antennas especially in coastal areas near salt
water . My QTH is 30 metres (100 ft) from a salt water beach.

Frank GM0CSZ / KN6WH

853. Re: Cushcraft Vertical Trap Consistency - Is there a trick guys?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 23:02:50 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99975C02D1EB0nonenowhere@61.9.191.5>
Source record: 36967

"Kevin Hastings" <myfamilydotcom@hotmail.com> wrote in
news:46ceeefb$0$4068$9a566e8b@news.aliant.net:

> I've spent 2 months or so of tweaking an older Cushcraft ATV-5 5-band
> vertical with a friend's MFJ analyser and have had this thing exactly
> where I want it several times now. After tightening things down and
> putting vinyl electrical tape on all traps and section joints (where
> it seemed to make sense) it would look fine for a few days to a week.
>
> Then the resonant points of some bands would shift up to no-man's band
> seemingly overnight and stay there. I suspected poor screw conections
> at the traps, and so have been adding a stainless steel pipe-clamp
> connection just above and below the trap for improved connection. Made
> things better I thought - now 1-2 bands are just out of whack again.
>
> There's always moisture inside the trap when I disassemble the thing,
> so I'm wondering if maybe I shouldn't be trying to tape up the traps
> at all - maybe they are retaining water or something that is affecting
> the capacitance. Each trap has a drain hole at the bottom, and the
> aliminium pole itself has drain holes every now and then that I'm
> trying not to interfere with.
>
> Is there a trick, or some practical experience here that you can
> share?
>
> I've had a lot of fun experimenting with this in any case, but
> winter's coming...
>
> Thanks,
>
> Kevin VE9-XYZ
> myfamilydotcom@hotmail.com
>
>

Kevin,

In addition to the other responses at this time...

I note you used an MFJ analyser, not further described. Assuming it is
the MFJ259 or like...

Did your VSWR readings with proper transmitter reconcile with the MFJ?
If not, I would favour the transmitter VSWR readings over the MFJ (the
wideband detector in such instruments is too easily disrupted by other RF
sources to depend on them absolutely).

Regarding tape, remember that any measure that you take to prevent ingress of water is also likely to prevent egress. Worse, you may not prevent vapour being drawn into the trap, but may prevent condensate leaving and so build a water trap. Drain holes aren't always as effective as we would like (blocking for various reasons), but I would not obstruct drainholes. Indeed, period clearing of drainholes is a good idea if convenient.

I see others have raised the issue of the reliability of internal connections in the traps, another common problems with those antennas.

Owen

854. Re: Source for large #31 toroids

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-24 23:21:53 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fanp6h$4oc$1@news.jpl.nasa.gov>
Source record: 36968

Cecil Moore wrote:
> Bill Ogden wrote:
>
>> Thank you. I did not see it in their listings, but I will now assume
>> they have these toroids.
>
>
> The Fair-Rite link will take you to #31 material.
>
> http://www.fair-rite.com/

But Fair-Rite doesn't sell direct.. you need to order from a
distributor, and many have minimum orders. Lodestone Pacific (I think)
has a $20-30 minimum order, but you'd better have the exact Fair-Rite
partnumber..

855. Re: Cushcraft Vertical Trap Consistency - Is there a trick guys?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 01:09:02 UTC
From: W3JDR <joe@roccis.com>
Message-ID: <OiLzi.1550$OM1.1000@trnddc07>
Source record: 36969

>> There's always moisture inside the trap when I disassemble the thing,
>> so I'm wondering if maybe I shouldn't be trying to tape up the traps
>> at all - maybe they are retaining water or something that is affecting
>> the capacitance. Each trap has a drain hole at the bottom, and the
>> aliminium pole itself has drain holes every now and then that I'm
>> trying not to interfere with.
>>

It's very difficult to hermetically seal a large surface-area container from moisture ingress. What happens is that, on a warm sunny day the container heats up, causing the inside air to expand , pressurize the container somewhat, and leak out. Then a thunderstorm blows in and cools the container suddenly , causing the inside air to quickly contract, pulling a vacuum and consequently sucking in some of the humid outside air. The humid air that was sucked in then condenses back to water, which remains trapped unless some reasonable size 'weep' holes are provided at the lowest point.

The moral of the lecture is that, unless you have taken substantial measures to guarantee a hermetic seal, you should have drain holes.

Joe
W3JDR

856. Re: Cushcraft Vertical Trap Consistency - Is there a trick guys?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 01:31:19 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9997752F51F03nonenowhere@61.9.191.5>
Source record: 36970

"W3JDR" <joe@roccis.com> wrote in news:OiLzi.1550$OM1.1000@trnddc07:

>
>>> There's always moisture inside the trap when I disassemble the
>>> thing, so I'm wondering if maybe I shouldn't be trying to tape up
>>> the traps at all - maybe they are retaining water or something that
>>> is affecting the capacitance. Each trap has a drain hole at the
>>> bottom, and the aliminium pole itself has drain holes every now and
>>> then that I'm trying not to interfere with.
>>>
>
> It's very difficult to hermetically seal a large surface-area
> container from moisture ingress. What happens is that, on a warm sunny
> day the container heats up, causing the inside air to expand ,
> pressurize the container somewhat, and leak out. Then a thunderstorm
> blows in and cools the container suddenly , causing the inside air to
> quickly contract, pulling a vacuum and consequently sucking in some of
> the humid outside air. The humid air that was sucked in then condenses
> back to water, which remains trapped unless some reasonable size
> 'weep' holes are provided at the lowest point.
>
> The moral of the lecture is that, unless you have taken substantial
> measures to guarantee a hermetic seal, you should have drain holes.

Now that was an original though posted in response to my post!

857. Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 01:33:41 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99977595A83C7nonenowhere@61.9.191.5>
Source record: 36971

Quiet sun radio noise is often used for measurements of radio receiving systems. The radio flux from the quiet sun is a known signal in that it is measured and reported at observatories around the earth, and therefore provides a basis of assessment of radio receiving systems.

I have been playing around with a little online calculator to calculate interpolated recent solar flux data for amateur radio UHF and microwave bands from published observations.

It is at http://www.vk1od.net/qsrf for those who may find it useful.

Owen

858. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 01:50:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13cv2n6r7q05s78@corp.supernews.com>
Source record: 36972

Bob Miller wrote:
>
> I have an Oak Hills Research WM-2 QRP Wattmeter, which includes a
> 0-100 milliwatt scale.
>
> With an MFJ 269 Antenna Analyzer hooked to the transmitter side of the
> wattmeter, and an MFJ dummy load hooked to the load side of the
> wattmeter, I get a reading of 3 milliwatts forward, 0 milliwatts
> reflected.
>
> Not sure whether the FCC is concerned with signals at the 3 milliwatt
> level...

Most if not all the part 15 rules are defined in terms of field strength, not power. 3 mW is way, way more than enough to exceed some of the limits on some frequencies, when connected to even a poor antenna. For example, Part 15 shows, in 15.209, that intentional radiators aren't allowed to produce a field strength greater than 100 uV/m (with exceptions) at 3 meters from 30 - 88 Mhz. 3 milliwatts will produce *1,000 times*, or 60 dB greater than, this amount when connected to an isotropic antenna. Hook it to a dipole to get another few dB. The limit for class A digital devices (one class of unintentional radiators) is the same in that range, according to 15.109. So don't think that just because you consider a signal to be QRP that it's legal.

That said, I agree that chances of prosecution are zero for using these devices unless serious and/or intentional interference results. And I strongly agree with the folks who have said that the last thing you want to do is force a specific ruling on the matter from the FCC.

Roy Lewallen, W7EL

859. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 02:58:41 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns999783FF4429Cnonenowhere@61.9.191.5>
Source record: 36973

Roy Lewallen <w7el@eznec.com> wrote in news:13cv2n6r7q05s78
@corp.supernews.com:

...
> Most if not all the part 15 rules are defined in terms of field
> strength, not power. 3 mW is way, way more than enough to exceed some
of
> the limits on some frequencies, when connected to even a poor antenna.

I wrote a little article to inform people in the BPL debate... it started
out as:

How much radiated power does it take to create an S9 signal?

Try this quick quiz:

What is the EIRP of a 7MHz transmitter that results in a S9 signal at a
receiver located 1km from the transmitter, is it closest to:

1. 5 Watts;
2. 1 Watt;
3. 300 milliWatts;
4. 5 milliWatts;
5. 3 microWatts.

Answer: e, it is just 3 microWatts EIRP.

Remember that it takes less than a nanoWatt EIRP (ie 10E-9 Watts, a
thousandth of a millionth of a Watt) of leakage of radiofrequency energy
at 7MHz from BPL enabled power lines 10 metres from a dipole to cause S9
level interference.

Are you ready for BPL enablement of your home and neighbourhood?
http://www.vk1od.net/bpl/AreYouReady.htm

Owen

860. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 05:20:05 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <9_Ozi.21309$eY.18278@newssvr13.news.prodigy.net>
Source record: 36974

Michael Coslo wrote:
> You been out of town? I haven't heard much from you lately.

I have moved to a new QTH and only had dialup for
awhile - hardly worth the effort of dialing.
--
73, Cecil http://www.w5dxp.com

861. MI5 Persecution: Chris Tarrant - 10/March/1999 (496)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 05:53:33 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072505534019@4ax.com>
Source record: 36975
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Chris Tarrant - 10/March/1999

Certainty level: 25%

This one might be aimed at me, or it might be tinged with a whiff of intent, although I only give one chance in four for Tarrant's thoughts being aimed
at me when he said this. During his "Who wants to be a Millionaire" TV show in March 1999, he said;

if you're watching the show jumping up and down screaming at the telly,
remember you could be here. You can either seek professional help or call us...

The background is as follows. In early March I'd sent a quantity of emails to Capital FM, the London radio station where Mr Tarrant has his breakfast
show. They were addressed to the email account which Mr Tarrant used to read emails posted on Capital's website. Capital objected to the quantity
of emails - in fact, they contacted the Metropolitan Police's Computer Crime unit, who, in turn, "felt my collar" by giving me a verbal warning
over the phone to cease this behaviour.

The emails contained the words which I had heard Mr Tarrant speak in early 1994, namely;

"You know this bloke? He says we're trying to kill him.
We should be done for attempted manslaughter".

At the time of writing (May 1999), the Police have not told me what aspect of the emails was "illegal", nor despite my repeated urging have they
questioned Mr Tarrant about his remarks from 1994.

Regarding the clip from Tarrant's show above. The Police spoke to me on the afternoon of Wednesday 10 March 1999. Tarrant's live show went out
that same evening. The Police have told me that after speaking to me they told Capital FM that they'd spoken to me regarding the emails. So Tarrant
would have known by the time of the show who'd sent the emails and why.... and it's quite possible that his remarks about "seeking professional help"
were aimed at me personally following my attempts to persuade him to own up to his 1994 remarks.

496

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
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862. MI5 Persecution: Nicholas Witchell - 10/April/1999 (1719)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 06:19:47 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072506195310@4ax.com>
Source record: 36976
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Nicholas Witchell - 10/April/1999

Certainty level: 100%

This clip is of Nicholas Witchell reading the BBC2 evening news at 7pm on Saturday 10 April 1999. You have to understand that the psychopaths of
the Security Service consider their abuse of me to be "so funny"; and central to their persecution of me is their inducement of their "bought
journalists" like the BBC's Nicholas Witchell to laugh at me on television.

So in this clip we see Witchell smirking and grinning while he reads the news. Only part of the news broadcast is shown in the clip; preceding it,
Witchell's upper lip quivers in mirth for several minutes, until his entire mouth twists into the uncontrollable smile shown in this clip,
through the excuse of a weak non-joke about sports fixtures.

1719

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
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863. MI5 Persecution: England expects every man to do his duty (2942)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 06:47:46 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072506473785@4ax.com>
Source record: 36977
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

"England expects every man to do his duty"

Certainty level: 90%

This video clip portrays a fairly-certain case of unpleasant MI5 harassment; because of context, surrounding events,
not just this one happening. It's the first time an MI5 agent has been caught on video, and, presumably to their chagrin,
their paid agent is either engaging in an onanistic practice, or, more probably, pretending to do so, in order to
carry out an act of harassment.

The background is as follows. In late June 2000 I had posted the following message to Usenet, about MI5's making
obscene noises at me on several recent occasions;

>From: bu765@torfree.net (Mike Corley)
>Subject: relax, don't do it (mi5 again)
>Date: 22 Jun 2000 00:00:00 GMT
>
>you will recall that a couple of weeks ago I was supposing what MI5 were
>doing with their 'single'handed' posting antics at 2am
>
>exciting stuff
>
>so about a week ago someone rings me up at home.... 'is that Emmanuel
>Goldstein?' then he phones back the following day and goes 'huaaaagh' on
>the phone before dropping the handset in excitement
>
>and a day or two later, just coming out of our house to put something in
>the rubbish bin, a pair of blokes over the other side of the road, again
>start making orgasmic noises
>
>I'm not paranoid enough to record minidisc when I pop out for a few
>seconds..... but perhaps I should be

The video clip, which was captured on 1/September/2000, is the culmination of that thread of harassment. You
have to understand that MI5's abuse is in threads; they choose a topic, and then continue with it for months
and years. Sometimes they drop a topic, usually to be replaced by a worse one, and you never hear of it again.

If the person in the video clip were not an MI5 agent, then he would deserve privacy, despite carrying out a real

or feigned act in a public place. But I am almost 100% sure, because of context, that this man was one of their
operatives, which removes any consideration of privacy from his act. He is facing away and cannot be clearly
identified from this clip. I've never seen this man before or since, but that is true of most other such incidents.

2942

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
------->>>>>>http://www.NewsDemon.com<<<<<<------
Unlimited Access, Anonymous Accounts, Uncensored Broadband Access

864. MI5 Persecution: C4 SnowMail - January/2001 (4165)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 07:18:56 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072507190338@4ax.com>
Source record: 36978
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

C4 SnowMail - January/2001

Certainty level: 50%

In January 2001 I signed up for Channel 4 TV News's email service SnowMail, under an anonymous email address.
Quite soon Jon Snow and others started getting at me in the SnowMail bulletins, so I promptly unsubscribed.
Here are three distributed messages which may be intended to be against me; I have given these items a joint
probability of 50% only, since it is quite difficult to be sure these are against me, although I think they
may well be.

First item is from 5 January 2001. "Back passage contacts" might genuinely be about Labour were communicating
in a shielded way with ITN; but it may be about Snow's covert communications with me on his programme and in
this bulletin; and it's a slightly strange thing for him to say, it suggests the human body's back passage.
"I wish they'd come and talk on our website".... Snow knows I'm subscribed to his mailing list, and he may be
encouraging me to talk to him by email; again, if that comment were genuinely about Labour, then it would be
a strange thing to say, since the politicians talk to Snow by phone and on his programme, so they wouldn't talk
to him by email; my suspicion at the time is that he was trying to persuade me to talk to him by email,
so he could decently lie that my thoughts of reference were incorrect.

From: "Snow C4N, Jon"
Subject: Channel 4 News briefing
Date: Fri, 5 Jan 2001 17:15:06 -0000
MIME-Version: 1.0

January 5, 2000

Good afternoon dear viewer,

Well the 'snowmail' drew a little ire from Labour HQ yesterday. A sensitive call at 6.35pm from my friendly
mentor there sought to correct the impression I gave in yesterday's missive that in some way Labour was bounced
into naming these latest millionaire donors. Well I'm afraid they were...rest assured Paul Hamlyn would not have

been named without the diligent sleuthing of my colleagues, and had HE not been named neither would these latest two.

The only serious inaccuracy I must plead to was the promise that we would put these matters to a 'senior Labour
person'...alas none was forthcoming...I shall make no such rash promise again. My same mentor was on the phone again
during last night's Channel 4 News urging us to 'get some reality into the programme'. I fear we may have touched a
sensitive nerve...and the election campaign has not even started, or has it? I shall try to keep you posted with these
'back passage contacts' as the campaign unfolds..from all sides. I do wish they'd come and talk things over with all
of us on the web site...here's an open invitation...

So to today:

Harold Shipman murdered as many as 250 people it now turns out. But he is never to be tried and relatives who seek
closure to their uncertainties will never reap satisfaction..we have the DPP, the Chief Medical Officer and a solicitor
for aggrieved and bereaved families on the programme..the world's second-worst mass murderer..can he be allowed to
escape further action?

Sending private/sexy emails in company time gets workers the sack..Big Brother spies on office premises..is electronic
life in the work place getting out of hand? We explore what we can...and if you are not sure what you can and can't
send, our site spells out the legal dos and don'ts and gives you the chance to put your views to us.

The CIA publishes its risk assessment for the world in the coming years..beyond the CIA itself, what's the biggest
threat to life and liberty? Find out on Channel 4 News..and a major encounter with a man expected to take a top job
in the Bush administration...

And a sumptuous piece from Nicholas Glass in Valencia..a city transformed by a brilliant young architect for half
the price of what the Dome cost us.

Lots moving, see you at 7.00,best as ever,

Jon Snow

The next contact was on 11 January, with the unsubtle words "the lunatics have taken over the newsroom"
from Krishnan GM. The phrase needs no explanation as to why it might be a dig at me.

From: "Guru-Murthy C4N, Krishnan"
Subject: Channel 4 News briefing
Date: Thu, 11 Jan 2001 16:56:25 -0000

MIME-Version: 1.0

January 11, 2001

Good Afternoon. Jon's away so the lunatics have taken over the newsroom. I am joined by Samira for tonight's show.

The Depleted Uranium confusion deepens. What did Ministers and senior officers know about the risks to soldiers?
What did they tell others? And why the lack of candour over the recent documents that have surfaced? Having
dismissed the army report leaked yesterday warning of the dangers of exposure to DU as written by a trainee and
littered with mistakes, the Ministry of Defence now accepts it was written by an experienced officer.
But they won't say who. More awkwardly it emerges that senior officers decided a month after it was written that
the report should be circulated to all personnel likely to come into contact with DU. But was it? Nobody seems to
know. Our Science Correspondent Andrew Veitch has also visited the lab in Oxford that could begin testing
veterans for Depleted Uranium within six months, but they have had no contact from the government as yet. From
the Tories, Mr Duncan Smith is likely to join us. And we have Defence Secretary Hoon coming into the studio to
answer the obvious (and not so obvious) questions.

No interest rate cut today from the Bank of England, but could it be next month? As real fears are raised about
the likelihood of recession in the US how could it affect us over here? There's been a recent consensus that
Britain could weather the storm instead of falling into the usual pattern of shadowing American trends. But how
realistic is that? And what about all that inward investment we rely on from the States? Liam Halligan has been
looking at just what impact economic downturn across the water would have on us.

The former Bosnian Serb President Biljana Plavsic pleaded not guilty to charges of warcrimes including genocide
today. She was number two to Karazdic and a reputed hardliner during the "ethnic cleansing" of Bosnia.
But has a deal been done on her sentence if found guilty? Just why did she get on a plane and give herself up
to the Hague War Crimes Tribunal? Nobody seems to have any explanation. Her lawyers are asking for special
accommodation and even the possibility of bail. Gaby Rado is there and joining us live is the first Prosecutor
in the Hague Judge Goldstone to discuss whether plea bargains and deals are the only way to get the real villains.

Also the astonishing news that scientists in America have bred the first genetically engineered monkey. What will

they be used for and what's the next step? Does anybody really believe they won't do it to humans before too
long? Julian Rush will have details.

All that and loads more at seven. See you then, I hope. Krishnan.

The third and final item is from 24 January, shortly after which I unsubscribed from SnowMail. Again, it is difficult
to be sure if this item refers to me; it may do, it may not do, 50% captures the possibility. Snow refers to
"third leg of [Blair's] political footstool". In English culture "third leg" indicates one's male member;
Snow's phrase may be a sexual reference, of which there were others around that time.

From: "Snow C4N, Jon"
Subject: Channel 4 News briefing
Date: Wed, 24 Jan 2001 16:37:36 -0000
MIME-Version: 1.0

January 24, 2001

Good evening dear Channel 4 News viewer,

There are times in this business when you suffer severe attacks of deja vu...haven't I already said "Mandelson
Resigns!"...I'm afraid I have, and tonight I shall say it again. He's gone, the fat lady has not only sung but
died completely and utterly on his career...that is the end of the former Northern Ireland Secretary's political career.

It's a body blow against Blair for whom Mandelson was a mentor, manipulator, calculator, friend, brother and the
third leg of his political footstool.
It's a body blow for a Prime Minister who has had to have him resign not once but twice. It calls into question
Tony Blair's judgement. Mandy, probably one of the most brilliant spirits in politics, flew too close to the
sun...suffering finally at the hand of his own diabolical flaw.
Amazingly it's a flaw Blair understood more keenly than anyone...

And then there are the Hindujas who have compromised every political party with ridiculous photographed party
poses..who are they and how do they work?
Masses moving on all fronts on this story tonight. We have the resignation speech in full on our site www.channel4.com/news;
if you want to see how Mandelson bowed out.

There are other developments:

The cancer tragedy at Nottingham Queens medical centre..the wrong drug going into the spinal column of an eighteen-year-old
Leukemia victim who's now in intensive care, dangerously ill...it's happened before..why has it happened again?

And a moving interview with Sharon Sage who's mother Lorna Sage wrote a spell binding memoir highly rated in last night's
Whitbread Prize. An exceptional piece....

A highly political night....see you at seven on four...best, as ever, Jon

After this email I unsubscribed from SnowMail. I could not be sure that these items were or were not about me,
but it's an unpleasant feeling that Mr Snow might be getting at me in writing, as he certainly was when he watched
me while presenting the news; so I cut my losses, so to speak, and bailed out.

4165

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Posted via NewsDemon.com - Premium Uncensored Newsgroup Service
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865. MI5 Persecution: BBC-TV See You, See Me - 7/Dec/2001 (5388)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 07:55:21 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072507552734@4ax.com>
Source record: 36979
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

BBC-TV "See You, See Me" - 7/Dec/2001

Certainty level: 80%

On Friday 7 December 2001, BBC Schools aired a TV programme from their "See You, See Me" series.
The series was based in Scotland, with Grant Stott and Wilma Kennedy trying to find some stolen jewels.
Its web home is www.bbc.co.uk/scotland/education/seeyouseeme/

The programme appeared to make some "subtext" references to my situation. Kennedy refers to "it's not fair",
which is a key phrase; its existence started with OCTS MD Hugh S.-W. who humorously referred to my treatment
with the same phrase.
The subtle statement is that it is fair, because we're doing it, and we're always right, even when we're wrong.

The phrase "useless idiot" from the police chief is a clear insult directed at me, and needs no explanation.

But it is the third item in this clip which is most telling. Stott says the words, "humiliating in front of
the whole public, it would crucify us" if the investigation were called off. That's the phrase that assures
this clip of an 80% probability rating. MI5 are trying to humiliate me "in front of the whole public",
and their strategy is a mixture of ambiguous covert, such as this very programme, and clear overt.

5388

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866. MI5 Persecution: Channel Four TV News - 10/April/2002 (6611)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 08:20:47 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072508205378@4ax.com>
Source record: 36980
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Channel Four TV News - 10/April/2002

Certainty level: 80%

I was watching Jon Snow on Channel Four TV News on Wednesday 10 April, and he again reacted on seeing me
watching his programme. At 7.25pm he was reading an item on atrocities during the Balkan war;

JS: "It was Europe's worst massacre since the Second World War, and Dutch army officers [cough] and the
United Nations should share the blame. So says the first authoritative report into the murder of
thousands of Muslim men in Srebrenice at the height of the Bosnian war in 1995. The 7,500 page document
took Dutch Government researchers six years to prepare, and it condemns military and political leaders
for sending peacekeepers on a mission impossible. Our Foreign Affairs correspondent Gaby Rado,
who went to Srebrenice very soon after the massacre, is with us now. Gaby, how damning is this report?"

GR: "Well it is very severe. It accuses the Dutch Government of sending badly armed and badly briefed
Dutch soldiers into a very dangerous space out of a sense of national arrogance basically. It accuses
the United Nations basically of..."

There are two incidents in this one recording. The first (80% certainty) is when Jon Snow develops a frog in
his throat in the first sentence, shortly after reading the text "Europe's worst massacre". There is both
verbal expression and facial expression at that point; he is laughing at me, which is at odds with the serious
material he is reading. His eyebrows twitch upwards, and he is smirking at the phrase "Europe's worst massacre", and its application to the Security Service's actions against me. Another aspect
is that when Snow said "Europe's worst massacre", I facially reacted; in return, Snow would have seen
my change of expression, and followed it with his own reaction. He almost says "United States" instead of
"United Nations"; he isn't looking at his autocue, his mind is off what he is reading, instead he is looking
at me in the little monitor where he sees me through the television.

The first incident I'm fairly sure about, but the second I only give a 20% certainty to; it's when Gaby Rado
talks of a "sense of national arrogance", supposedly about the Dutch, but perhaps the English actions
against me for over a decade. If Rado's statement were about me, then it would be condemnatory of MI5
as being "arrogant"; but I cannot be reasonably certain it's about me, or much less so that Snow's
reaction in the first instance, anyway.

6611

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867. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 08:21:30 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns9997DD271413doldridgsprintca@64.59.135.159>
Source record: 36981

Owen Duffy <none@no.where> wrote in
news:Xns99977595A83C7nonenowhere@61.9.191.5:

>
> Quiet sun radio noise is often used for measurements of radio
> receiving systems. The radio flux from the quiet sun is a known signal
> in that it is measured and reported at observatories around the earth,
> and therefore provides a basis of assessment of radio receiving
> systems.
>
> I have been playing around with a little online calculator to
> calculate interpolated recent solar flux data for amateur radio UHF
> and microwave bands from published observations.
>
> It is at http://www.vk1od.net/qsrf for those who may find it useful.

There was a time once....

I used to have an FT-221 tricked out with a hot front end. Solar noise
would run the S meter up to well over the S9 mark and you could even see
the galactic plane passing through the antenna pattern. Needless to say,
it heard well on terrestrial 2m SSB.

--
Dave Oldridge+
ICQ 1800667

868. MI5 Persecution: BBC1 TV News - 18/Dec/2002 (7834)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 08:51:29 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072508513518@4ax.com>
Source record: 36883
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

BBC1 TV News - 18/Dec/2002

Certainty level: 30%

This item occurred on Wednesday 18/December/2002, on BBC1 TV News shortly after 6pm. It is one of the "coincidence"
category of happenings, where people by supposed coincidence repeat exactly the words I have said or thought very recently.
In this case, the BBC's New York correspondent Stephen Evans, live from NYC, says the words "airy fairy language",
during a piece on Britain's entry in the competition for a successor to the WTC after 9/11.

I had been thinking the words "airy fairy" a day or two previously and may have spoken them in my sleep. I did not speak them awake.
The TV practice in 1990-92 had been to repeat on TV/radio (or at work) words which I had either spoken while awake, or words I had
thought but not said consciously - since I know that I sometimes say things in my sleep, but cannot later recall saying them,
obviously since I was unconscious at the time. The TV news reader or reporter then finds a context in which to drop a particular phrase;
this practice has a famous exemplar in the "Phil the Greek" item relating to the Duke of Edinburgh - who had been called Phil the Greek
in Private Eye, then a TV reporter managed to structure his report to include the words "fill the Greek community with alarm".
It might appear funny, but when such "intentional coincidence" happens a lot, as in 1990-92, and when it supports other methods of obscenity,
then the amusement value wanes.

The choice of words appears to form a homosexual reference - the way it works is that the Security Service are blokes fantasising continually
about another bloke, so to avert the obvious observation of their being gay
see here for another instance of unwholesome MI5 fantasising in public),
they try to assign the attribute to the victim - they do this sort of thing all the time, with all sorts of attributes. However, in this
particular case I give it only a one in three probability, since this incident seems to have been a one-off at that particular time.

7834

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869. MI5 Persecution: Life is so hard (496)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 09:54:41 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072509544752@4ax.com>
Source record: 36884
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Life is so hard

Certainty level: 100%

This relates to harassment at my workplace in Canada. Yes, "they" had
their claws into my employers in North America, it doesn't just happen
in England, it happens here as well.

During the second half of 1996, at work, I was sitting near a co-worker
whom we shall call Mark (we can, because that's his name). This guy
occasionally came out with words and phrases that made me think that
"they" had got to him and were supplying him with information about my
home life (not social life please note, because of course I don't actually
have a social life here).

During November 1996 I tried to catch him in the act of saying something
"meaningful", a difficult exercise because as soon as he saw a tape
recorder, he shut up completely, except for times when he knew he would
be out of range of the walkman. (Note that the quality of this recording
is not very good; I was just using a four-year-old tape walkman with
a cheap microphone, quite low-tech).

During the evening of 12 November 1996, at home in my apartment (flat to
you UK-ers), I said "life is so hard, and then you die". A nihilistic,
negative thing to say, but quite distinctive. The following day,
13 November, Mark said loudly, "life is so hard eh, and then you die"
followed by loud laughter.

In my book the precise repetition of the words makes this incident a
100% certainty. You, the reader, may differ, but then living in a free
country allows each of us to have our own opinions, doesn't it?

496

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870. MI5 Persecution: GLR: David Hepworth (21/Feb/1997) (1719)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 10:27:43 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072510274913@4ax.com>
Source record: 36885
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

GLR-David Hepworth (21/Feb/1997)

Certainty level: 80%

I was listening to BBC Greater London Radio (GLR) by stealth, ie. on my walkman with headphones, with the sound turned right down, to prevent anyone from hearing what I was listening to. Yet somehow "they" are still able to tell what station I am listening to on the walkman. After half an hour or so listening to GLR, DJ David Hepworth came out with this;

"I assume Brian, do we have an embarrassment of prizes in there, we do, don't we, absolute obscene amounts of prizes, there will no doubt be a riot at the back door, and that's A-level coming up after this"

The key phrases in what he said are, "EMBARRASSMENT of prizes", and what he himself emphasised verbally, "ABSOLUTE OBSCENE amount of prizes". It is my belief (based on content and tone of voice) that when he spoke these phrases he knew I was listening, and that the phrases refer directly to my situation. The "EMBARRASSMENT" is the embarrassment he and other media people would feel at having their wrongdoing exposed; the "ABSOLUTE OBSCENE" (which he verbally emphasised) described the disgusting sexual abuse which the harassers have been throwing at me.

Of course, I can't prove that this is what he meant, although this has happened enough times that it's hard not to recognise it when you see it. I sent David Hepworth a copy of this explanation, with the results listed in a subsequent item (David Hepworth 9/May/1997).

1719

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871. MI5 Persecution: GLR: David Hepworth (9/May/1997) (2942)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 11:03:34 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072511033942@4ax.com>
Source record: 36886
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

GLR-David Hepworth (9/May/1997)

Certainty level: 100%

This time I deliberately listened to Hepworth with the sound turned up on the radio, to try to get a reaction. Sure enough, he and his cronies reacted;

David: "we have executive drivetime, and we have Brian in charge of the prize cupboard. Brian it's not a bad prize cupboard this week is it?"

Brian: "no David in fact it's an absolute (EMPHASIS) embarrassment (END-EMPHASIS) of prizes this evening" (laughter)

David: "what have we got?"

Brian: "well in my left hand alone we've got that .... Gary Clale, I don't know if you remember him obviously still alive and kicking.... and that's just in my left hand"

David: "So it's certainly worth competing. Rock and roll spelling test is your first opportunity to take advantage of this embarrassment of prizes"

What I "read into" this item should again be quite obvious. Remember, I sent off a letter of complaint to Hepworth after his spying activity during the previous show. Here the emphasis on "absolute embarrassment" of prizes shows he knows this is a "key" phrase.

It might be interesting to try to talk to DJs like Hepworth and ask them what they get out of abusing their listeners. But if you challenge them directly, they show their true colour (yellow) by either not answering the challenge, or by denying that harassment has taken place.

2942

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872. No tuner dipole ; was: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 11:23:42 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <X6CdnYmcEoGxjE3bRVnyvgA@pipex.net>
Source record: 36887

I have moved to a new QTH and only had dialup for
awhile - hardly worth the effort of dialing.
--
73, Cecil http://www.w5dxp.com
==========
Cecil , Great antenna web site . Intent to implement your 'no tuner'
dipole with 450 ohms feeder by adding bits of feeder operated by relays
with quadruple change over contacts.
I assume it is alright to build the lot in a box made of MDF with the
450 Ohms ribbon coiled up.
An open perspex sheet would be somewhat difficult to accommodate in my
shack.

Frank GM0CSZ / KN6WH north of Scotland

873. MI5 Persecution: Capital Radio (11/April/1997) (4165)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 11:38:20 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072511382677@4ax.com>
Source record: 36888
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Capital Radio (11/April/1997)

Certainty level: 10%

A nice easy one here. The DJ is heard to say (around 8.30pm);

"Jacko in town, what a gig it's going to be, that guy is amazing, and
psychotic, but amazing on stage, 0171-420-0958, on stage he's a madman
but he's wonderful"

I was listening to Capital loud and clear, trying to get a reaction.
The above may have been a reaction. I'm not sure if it was, and I'm not
sure that it wasn't.

4165

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874. MI5 Persecution: Neil Fox (March/1998) (5388)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 12:11:55 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072512120003@4ax.com>
Source record: 36889
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Neil Fox's Juke Box on Capital Radio (week ending 15/March/1998)

Certainty level: 70%

Here is an excerpt from Neil Fox's show on Capital Radio 95.8FM, sometime during the week ending Sunday 15/March/1998 (probably during the weekend, but I don't remember).

First I will give the text of the conversation between Neil Fox and telephone caller Martin, then I will state my interpretation.

(conversation) (F=Dr Fox, M=Martin the caller)

F: coming up on the jukebox, the hotline's 0171-4848-958, just a quick shout here and so who's this going to be then Mr Producer?
(staff, shouting) MARTIN!
F: Couldn't quite hear you, it's going to be?
(staff, normal voice) Martin.
F: Thank you. Martin, hello.
M: Hello, Foxy.
F: How are you Martin.
M: Er, knackered.
F: Why?
M: Didn't get much sleep last night. Party down the road.
F: What time did you go to bed?
M: Four o'clock this morning.
F: Well that sounds quite a reasonable Saturday night if you ask me.
M: I was up at eight.
F: You were up at eight this morning?
M: Yeah.
F: That's sick. Why? What on earth made you get out of bed at eight this morning?
M: My father.
F: Well that's no good. Why is he being sicko, is he being a sadist?
M: No, he out there, sort of clearing room.
F: Listen, is your dad there?
M: No, he's downstairs.
F: Oh mate, can you get him?
M: No.
F: Does he not let you on the phone? The only reason is that I wouldn't mind having a chat with someone who makes anyone get up at eight o'clock on a Sunday morning. I'm sorry, that's ill isn't it, that's out of order.
M: It's sick.
F: I'm just going to ask around here. What do you think then, eight o'clock Sunday morning? That's out of order isn't it, for any father?

(staff) Yeah, definitely.
F: Is he like victimising you or something, is there any reason why he wanted you up at eight o'clock? To clean your room?
M: Well as I say I got up at eight this morning to clean my room and it looks worse that it did yesterday.
F: Well I should have just left it and stayed in there until eleven o'clock if I was you.
M: Well I was up, I didn't get out of bed.
F: What, you didn't get out of bed at eight o'clock? No, he woke you up at eight o'clock. Did you do any cleaning at all?
M: I haven't touched my bedroom.
F: Top man. Boy you're going to get your arse kicked later aren't you. Now a song for you, what can we play?
M: Guns and Roses, "Sweet Child of Mine".
F: And we're going to dedicate this to your father?
M: No we're not, we'll dedicate this to my good mate Jamie, who's sitting on the bed now.
F: Right, hello Jamie. And anyone else? Any top totty in your life at the moment?
M: Unfortunately no.
F: The totty factor is quite low at the moment is it?
M: It's dead.
F: It's dead? What, nothing?
M: Nothing.
F: What, zero? Well, that's pathetic. No wonder you're down. You stay out til four o'clock and nothing. We'd better have words when we're off the radio I think. We need to give you a team talk. You have a good night tonight.
M: And you.
F: Take care.
(song starts)
F: Actually something was going through my mind. I think I'll leave it.

I'm not really sure whether this is in any way about me. It probably isn't. Probably it's just my nasty suspicious mind finding links where none exist. However, here is an explanation of why it might, possibly, be about me.

Throughout this interview, I was throwing abuse at the radio, and to my mind, Neil Fox was hearing the abuse, and responding interactively. This explains why he sounds so stressed when talking to telephone caller Martin, and the general violence of his words including "Boy you're going to get your arse kicked later aren't you".

The piece starts of with the producer shouting the name of the caller, which might be related to my loud vocalisations at the radio. The trouble starts off with Fox saying "That's sick". "Sick" might be taken as a reference to my condition. Then Fox says, "Why is he being sicko, is he being a sadist?", again sick = my illness, "sadist" = attitude of my oppressors towards me. "that's ill isn't it" = further comment on my illness. "Is he like victimising you or something" = again what my enemies are doing to me.

Fox sounds quite happy when he gets Martin to say "It's sick"; as you would expect him to, if the comment were directed at me. It is a constant feature of my enemies' harassment of me that they get intermediaries to verbalise the abuse. Immediately after saying "victimising you" Fox gives a little laugh, to show he thinks the victimisation (of me, not Martin) is funny.

Fox gets increasingly nasty as the piece progresses. "Boy you're going to get your arse kicked later aren't you" is not really what you would expect him to say if he were just talking to Martin. Fox is on the same side as Martin, so why would he be so verbally aggressive to him? On the other hand, if the piece is about me, then his strong words start to make sense.

Fox's jubilation at finding that Martin's "totty factor" is "dead" again doesn't make much sense unless you think that he might not be considering Martin's totty factor, but mine, since it's a fairly well known fact that my "totty factor" is not significantly above zero.

To round off the 135 second interchange, just as the next track is starting, Fox says, "Actually something was going through my mind. I think I'll leave it". Given that I was chucking abuse at Fox throughout, it is only natural for him have thought up a reply that he would have wished to have made, except that such a reply would (a) probably not be suitable for a family show, and (b) have given the game away completely.

So there you are. You the jury, what say you in the case of plaintiff vs. Neil Fox's Juke Box, guilty or not guilty?

5388

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875. MI5 Persecution: Neil Fox (Nov/1998) (6611)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 12:57:53 UTC
From: MI5Victim@mi5.gov.uk
Message-ID: <m07072512575852@4ax.com>
Source record: 36890
Cross-posted to: rec.bicycles.rides,rec.outdoors.rv-travel,microsoft.public.es.win2000,alt.tv.reality,rec.radio.amateur.antenna

Foxy's Showtime on Capital FM 25/11/98 7.35pm

Certainty level: 100%

This one, I can say with absolute certainty, is about me. It was recorded on my Sony Recording Walkman on the evening of Wednesday 25 November 1998. It doesn't mention me by name, so the objective observer might have trouble understanding why I'm so sure it's about me. I'm sure, because the harassment had restarted over the period when this piece was broadcast, and what Capital transmitted would have been in context with events at the time. (Sorry if that explanation is somewhat opaque, but I don't really want to embarrass myself by giving an explanation in detail, and an intelligent reader should be able to work it out for him/her self.)

This isn't the first time Capital have "got at" me; they were doing so right at the very beginning in summer 1990, when they said, "if he listens to Capital then he can't be all bad"; and Tarrant made remarks about me in his breakfast show in spring 1994, when he said, "you know this bloke? he says we're trying to kill him. We should be done for attempted manslaughter."

Unfortunately I didn't record those previous, much more conclusive instances of harassment by Capital DJs, and Capital Radio tells me they only keep recordings for three months. But lately I've been recording everything, and here is one product of that recording.

Neil Fox was introducing some petite Swedish songstress, sounded like Amelia, when he said something about her petite-ness ;

"she's a big big girl, actually she's really about tiny, she's this big, would you say what less than....."

then one of his studio staff shouted, "six inches"

then Fox laughed and said, "less than a meter tall, definitely"

What I think the "six inches" referred to should be obvious. I think it's sexual abuse directed at me.

Also there were a lot of words like "crazy", "mad" etc on this programme, which reinforced my belief that this was on purpose directed at myself.

I think Fox may be something of an unwilling participant in this abuse, he doesn't want to be an abuser but the persecutors are using his show and his staff to get at me. This is not the first time this sort of thing has happened from his show; and my guess is that it won't be the last

6611

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876. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 13:31:08 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <vdb0d35n5338a72fd2kcs884eu22311htd@4ax.com>
Source record: 36891

On Fri, 24 Aug 2007 18:50:30 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>Bob Miller wrote:
>>
>> I have an Oak Hills Research WM-2 QRP Wattmeter, which includes a
>> 0-100 milliwatt scale.
>>
>> With an MFJ 269 Antenna Analyzer hooked to the transmitter side of the
>> wattmeter, and an MFJ dummy load hooked to the load side of the
>> wattmeter, I get a reading of 3 milliwatts forward, 0 milliwatts
>> reflected.
>>
>> Not sure whether the FCC is concerned with signals at the 3 milliwatt
>> level...
>
>Most if not all the part 15 rules are defined in terms of field
>strength, not power. 3 mW is way, way more than enough to exceed some of
>the limits on some frequencies, when connected to even a poor antenna.
>For example, Part 15 shows, in 15.209, that intentional radiators aren't
>allowed to produce a field strength greater than 100 uV/m (with
>exceptions) at 3 meters from 30 - 88 Mhz. 3 milliwatts will produce
>*1,000 times*, or 60 dB greater than, this amount when connected to an
>isotropic antenna. Hook it to a dipole to get another few dB. The limit
>for class A digital devices (one class of unintentional radiators) is
>the same in that range, according to 15.109. So don't think that just
>because you consider a signal to be QRP that it's legal.

FYI, I checked the MFJ-269 manual, and it claims: "a relatively pure
(harmonics better than -25dBc) signal of approximately 3 Vpp
(aproximately 20 milliwatts) into 50 ohms."

So my measurement of 3 milliwatts on the wattmeter could have been
low.

Bob
k5qwg

>
>That said, I agree that chances of prosecution are zero for using these
>devices unless serious and/or intentional interference results. And I
>strongly agree with the folks who have said that the last thing you want
>to do is force a specific ruling on the matter from the FCC.
>
>Roy Lewallen, W7EL

877. Re: No tuner dipole ; was: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 17:20:59 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <_xZzi.63$ZA5.4@nlpi068.nbdc.sbc.com>
Source record: 36892

Highland Ham wrote:
> Cecil , Great antenna web site . Intent to implement your 'no tuner' dipole with 450 ohms feeder by adding bits of feeder operated by relays with quadruple change over contacts.
> I assume it is alright to build the lot in a box made of MDF with the 450 Ohms ribbon coiled up.
> An open perspex sheet would be somewhat difficult to accommodate in my shack.

The only way to coil up 450 ohm line is to keep all
parts of each coil at least 3-4 inches from all other
coils. A spiral will work but you certainly *cannot*
successfully coil up balanced ladder-line as you
can with unbalanced coax.
--
73, Cecil http://www.w5dxp.com

878. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-25 23:42:26 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <20f1d3d9hc5vtref0f5le3np8p1aqv19uc@4ax.com>
Source record: 36893

On Sat, 25 Aug 2007 08:31:08 -0500, Bob Miller <NOSPAM@neosoft.com> wrote:

>On Fri, 24 Aug 2007 18:50:30 -0700, Roy Lewallen <w7el@eznec.com>
>wrote:
>
>>Bob Miller wrote:
>>>
>>> I have an Oak Hills Research WM-2 QRP Wattmeter, which includes a
>>> 0-100 milliwatt scale.
>>>
>>> With an MFJ 269 Antenna Analyzer hooked to the transmitter side of the
>>> wattmeter, and an MFJ dummy load hooked to the load side of the
>>> wattmeter, I get a reading of 3 milliwatts forward, 0 milliwatts
>>> reflected.
>>>
>>> Not sure whether the FCC is concerned with signals at the 3 milliwatt
>>> level...
>>
>>Most if not all the part 15 rules are defined in terms of field
>>strength, not power. 3 mW is way, way more than enough to exceed some of
>>the limits on some frequencies, when connected to even a poor antenna.
>>For example, Part 15 shows, in 15.209, that intentional radiators aren't
>>allowed to produce a field strength greater than 100 uV/m (with
>>exceptions) at 3 meters from 30 - 88 Mhz. 3 milliwatts will produce
>>*1,000 times*, or 60 dB greater than, this amount when connected to an
>>isotropic antenna. Hook it to a dipole to get another few dB. The limit
>>for class A digital devices (one class of unintentional radiators) is
>>the same in that range, according to 15.109. So don't think that just
>>because you consider a signal to be QRP that it's legal.
>
>FYI, I checked the MFJ-269 manual, and it claims: "a relatively pure
>(harmonics better than -25dBc) signal of approximately 3 Vpp
>(aproximately 20 milliwatts) into 50 ohms."
>
>So my measurement of 3 milliwatts on the wattmeter could have been
>low.
>
>Bob
>k5qwg
>
>
>>
>>That said, I agree that chances of prosecution are zero for using these
>>devices unless serious and/or intentional interference results. And I

>>strongly agree with the folks who have said that the last thing you want
>>to do is force a specific ruling on the matter from the FCC.
>>
>>Roy Lewallen, W7EL

During the 1960's I engineered the antenna systems that flew on the early TIROS weather satellites. The
antennas radiated both RHCP and LHCP. In the earthward direction the gain was approximately 3 dBi. At the
ground station I operated the antenna had a 16 dBd gain at the beacon frequency of 136 MHz The beacon xmtrs
output power was 5 mW. While the satellite was at maximum slant range (just over the horizon) of 1800 miles,
the signal level from the beacons was several dB over S9 on R-390 receivers with their associated frequency
down converters.

Walt,W2DU

879. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 00:36:30 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99986BE4624A7nonenowhere@61.9.191.5>
Source record: 36894

Dave Oldridge <doldridg@leavethisoutshaw.ca> wrote in
news:Xns9997DD271413doldridgsprintca@64.59.135.159:

...
> I used to have an FT-221 tricked out with a hot front end. Solar
> noise would run the S meter up to well over the S9 mark and you could
> even see the galactic plane passing through the antenna pattern.
> Needless to say, it heard well on terrestrial 2m SSB.

That is no mean feat!

I think ambient noise temperature at 144MHz for an antenna pointed at cold sky is somewhere around 200K to 250K, when you add a pretty good receiver at say 30K, you are talking 230K to 280K total system noise, and the sun is probably around 800K with a low end 4 bay EME antenna setup (Gain~22dBi), for a noise rise of 10*log((800+255)/255) or 16dB.

A single yagi of gain around 15dBi is much poorer, not only is the sun noise reduced proportionately to the gain reduction, but the ambient noise increases with higher gain in the side and back area of the antenna, but it still should be possible to reliably 'see' the sun with a very good receiver.

Ambient noise temperature for a beam at zero elevation here in suburbia varies from 1000K to 6000K depending on the day and time... so a very low temperature receiver is wasted for terrestrial contacts.

Owen

Owen

880. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 02:10:16 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <ci5Ai.58746$Xa3.26736@attbi_s22>
Source record: 36895

>> I used to have an FT-221 tricked out with a hot front end. Solar
>> noise would run the S meter up to well over the S9 mark and you could
>> even see the galactic plane passing through the antenna pattern.
>> Needless to say, it heard well on terrestrial 2m SSB.
>
> That is no mean feat!

You better believe no mean feat! I worked off the moon on 432 MHz back in the late 70's. Sixteen 16 element Yagis (calculated gain ~26 dB) and an STA from the FCC to use 5 KW as long as the antennas were pointed above 25 degrees elevation. (Protecting Eglin radars some 200 plus miles away.)

I could consistently manage some 4, 4-1/2 dB of sun noise off a quiet sun and not one smidge more even with a mast mounted GaAs Fet preamp supposedly with some 0.8 dB NF.

I DID however, at around the same time, own a 2 meter Jap all-mode transceiver that I happened to measure the "S" meter accuracy with an HP signal generator. It turned out that 2 uVolts was "S"-1. THREE uVolts was "S"-9.

W4ZCB

881. LQQKing for 160m

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 04:21:56 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <c9udneMoaep-Yk3bnZ2dnUVZ_qiinZ2d@comcast.com>
Source record: 36896

I am LQQking for a Hustler 160m mobile coil and whip.

73's Howard W3CQH

882. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 10:50:31 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <SvOdnV4yfLZDx0zbnZ2dnUVZ8qWhnZ2d@pipex.net>
Source record: 36897

> I DID however, at around the same time, own a 2 meter Jap all-mode
> transceiver that I happened to measure the "S" meter accuracy with an HP
> signal generator. It turned out that 2 uVolts was "S"-1. THREE uVolts was
> "S"-9.
==========
Is it correct that for frequencies up to 30 MHz a S9 signal is 50
microvolt into 50 Ohms (or -73 dBm) but that for higher frequencies a
S9 signal is 5 microvolts into 50 ohms (or -93 dBm).
If that is (the agreed) norm ,was it ever formally sanctioned by IARU ?

I can hardly believe that any of the far eastern rice boxes have a
properly calibrated S-meter. Also the top end of the S-meter scale is
usually rather 'compressed', which surprises me since ICs with a log
type input/output relationship must be readily available.

Time to attempt calibrating the S-meter of my (almost vintage) TenTec
Paragon TRX.

Frank GM0CSZ / KN6WH

883. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 11:57:19 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <yUdAi.59290$Xa3.15837@attbi_s22>
Source record: 36898

>> I DID however, at around the same time, own a 2 meter Jap all-mode
>> transceiver that I happened to measure the "S" meter accuracy with an HP
>> signal generator. It turned out that 2 uVolts was "S"-1. THREE uVolts was
>> "S"-9.
> ==========
> Is it correct that for frequencies up to 30 MHz a S9 signal is 50
> microvolt into 50 Ohms (or -73 dBm) but that for higher frequencies a S9
> signal is 5 microvolts into 50 ohms (or -93 dBm).
> If that is (the agreed) norm ,was it ever formally sanctioned by IARU ?

I've never heard of a convention like that. Can't imagine a reason to make
it different for HF and VHF.
>
> I can hardly believe that any of the far eastern rice boxes have a
> properly calibrated S-meter. Also the top end of the S-meter scale is
> usually rather 'compressed', which surprises me since ICs with a log type
> input/output relationship must be readily available.

They are now. (AD 600, 603 and MOT chips with RSSI etc.) VERY expensive
compared to a couple of 2N2222 type IF transistors and mass production will
go to the ends of the earth to save a couple pennies.
>
> Time to attempt calibrating the S-meter of my (almost vintage) TenTec
> Paragon TRX.
>
>
> Frank GM0CSZ / KN6WH

If I had a Paragon, I'd try very hard to get rid of it. The worst radio Ten
Rec ever made (And the only up conversion one I remember) WRT LO phase
noise. Horrible on of course, both RX and TX. I had to put up with a
neighbors for several years. (And he-me when he was receiving. My
transceiver improved a whole lot when he bought a new radio.)

W4ZCB

884. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 12:00:27 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns9998DFD97971Enonenowhere@61.9.191.5>
Source record: 36899

Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in
news:SvOdnV4yfLZDx0zbnZ2dnUVZ8qWhnZ2d@pipex.net:

>> I DID however, at around the same time, own a 2 meter Jap all-mode
>> transceiver that I happened to measure the "S" meter accuracy with an
>> HP signal generator. It turned out that 2 uVolts was "S"-1. THREE
>> uVolts was "S"-9.
> ==========
> Is it correct that for frequencies up to 30 MHz a S9 signal is 50
> microvolt into 50 Ohms (or -73 dBm) but that for higher frequencies a
> S9 signal is 5 microvolts into 50 ohms (or -93 dBm).
> If that is (the agreed) norm ,was it ever formally sanctioned by IARU
> ?
>
> I can hardly believe that any of the far eastern rice boxes have a
> properly calibrated S-meter. Also the top end of the S-meter scale is
> usually rather 'compressed', which surprises me since ICs with a log
> type input/output relationship must be readily available.
>
> Time to attempt calibrating the S-meter of my (almost vintage) TenTec
> Paragon TRX.
>
>
> Frank GM0CSZ / KN6WH
>

Frank, leaving aside your apparent prejudice about the country of origin
of a radio...

It seems that IARU Region 1 Technical Recommendation 1 lays down the
Region 1 view of S meter equivalence in power, but that does not seem to
have wider acceptance more than 25 years later.

Talking about SSB telephony receivers...

The next problem that occurs is that many radios are loosely calibrated
with the selectable internal preamp OFF, a good idea for lower HF bands,
but questionable on VHF and above. The user manuals don't often state the
correct configuration for calibrated S meter response. Apparently, the
technology hasn't advanced enough to have the S meter calibrated whether
or not the internal preamp on in use.

(It is quite possible that the example that Harold gave is one of those
radios that is calibrated with internal preamp OFF and he measured it
with preamp ON.)

The radio's S meter may often be fairly roughly calibrated between about S6 and S9+20 (with the preamp OFF if that is the case for the particular radio), but is unlikely to be very accurate below and above that range.

Considering the design of a transceiver, if the S meter is calibrated with preamp OFF, the receiver could have a noise figure around 15dB, which means its noise floor is around -126dBm. Typically, the AGC is deferred until the signal reaches about 20dB above the noise floor, so that would be -106dBm+ which is about S3 and a half+. So the AGC will not operate, and the S meter not deflect until the signal is above S3+, yet the meters will typically be scaled from S0 or S1.

Next, these radios may be used with an external preamp, or a transverter, both with substantial gain. So, a transceiver that is roughly calibrated with the preamp OFF, is used with preamp ON for another 20dB or so of gain, then an external 25dB preamp offset by a few dB of line loss, so the S meter is now reading some 35dB high. The increased gain is usually much higher for a LAN-transverter-transceiver cascade.

In my experience, quantitative signal reports handed out on VHF and above are commonly nonsense, which is interesting given the greater focus on weak signal working and understanding path characteristics.

The other thing that contributes to this nonsense is that people cheating on power often give the other station the same report that they received to disguise the lack of symmetry due to their own excessive tx power.

FM receiver S meter calibration is a whole 'nother thing. Lacking an AGC system, it is typically limiter current that is used to drive the S meter and it usually takes less than 10uV to drive them to full scale, S9 might be indicated by just a few uV. Mind you, a 5uV FM signal has very good S/N, but that doesn't make it a strong signal.

Owen

885. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 12:22:39 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <jgeAi.76395$Fc.23046@attbi_s21>
Source record: 36900

> Talking about SSB telephony receivers...
>
> The next problem that occurs is that many radios are loosely calibrated
> with the selectable internal preamp OFF, a good idea for lower HF bands,
> but questionable on VHF and above. The user manuals don't often state the
> correct configuration for calibrated S meter response. Apparently, the
> technology hasn't advanced enough to have the S meter calibrated whether
> or not the internal preamp on in use.
>
> (It is quite possible that the example that Harold gave is one of those
> radios that is calibrated with internal preamp OFF and he measured it
> with preamp ON.)
> Owen

GM Owen

The transceiver I had back then didn't have a switcheable preamp. It was just always on. Don't even remember the mfg, but it was a little flat radio. 3 inches high (if that) and spread all over the desktop. The "S" meter was indeed driven from the limiters

Anyway, "S" meters that are inaccurate or change the value of the received signal when you turn a preamp on or off (Or an attenuator on or off) are an abomination. In this day and age of microprocessors, it's childs play to adjust the "S" meter to accomodate those changes. (Take a look at the "PicaStar" which does exactly that. It also yields 6 dB per "S" unit and 10 dB for every 10 dB over "S" 9 as well. Makes the radio into virtually a piece of lab test equipment. Short of that use, the "S" meter report IS rather rediculous. (You're 5-9, what was the call and name again?)

W4ZCB

886. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 12:44:40 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <vz2P35P4WX0GFAFC@ifwtech.co.uk>
Source record: 36901

Highland Ham wrote:
>> I DID however, at around the same time, own a 2 meter Jap all-mode
>>transceiver that I happened to measure the "S" meter accuracy with an
>>HP signal generator. It turned out that 2 uVolts was "S"-1. THREE
>>uVolts was "S"-9.
>==========
>Is it correct that for frequencies up to 30 MHz a S9 signal is 50
>microvolt into 50 Ohms (or -73 dBm) but that for higher frequencies a
>S9 signal is 5 microvolts into 50 ohms (or -93 dBm).
>If that is (the agreed) norm ,was it ever formally sanctioned by IARU ?
>
Wrong way around: those standards (along with 6dB per S-point) were
formally sanctioned by IARU, but almost no amateur receiver has ever met
those standards.

>I can hardly believe that any of the far eastern rice boxes have a
>properly calibrated S-meter. Also the top end of the S-meter scale is
>usually rather 'compressed', which surprises me since ICs with a log
>type input/output relationship must be readily available.
>
Conventional S-meters don't actually measure signal strength - they
measure the AGC voltage. The S-meter could only be accurate if the
voltage/gain characteristic of the AGC-controlled stages happened to be
accurately logarithmic across the entire dynamic range of the receiver;
which is almost never true.

An accurate S-meter will also need some compensation for variations in
gain across the HF bands. Above all, a true reading of 'signal strength'
should NOT change when you switch in a preamp or an attenuator, or vary
the RF gain.

For the long story, see 'S Meter Blues' by W8WWV:
http://tinyurl.com/8nme6

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

887. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 14:11:16 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13d32g3ap8inida@corp.supernews.com>
Source record: 36902

"Owen Duffy" <none@no.where> wrote in message
news:Xns99986BE4624A7nonenowhere@61.9.191.5...
> Dave Oldridge <doldridg@leavethisoutshaw.ca> wrote in
> news:Xns9997DD271413doldridgsprintca@64.59.135.159:
>
> ...
>> I used to have an FT-221 tricked out with a hot front end. Solar
>> noise would run the S meter up to well over the S9 mark and you could
>> even see the galactic plane passing through the antenna pattern.
>> Needless to say, it heard well on terrestrial 2m SSB.
>
> That is no mean feat!
>
> I think ambient noise temperature at 144MHz for an antenna pointed at
> cold sky is somewhere around 200K to 250K, when you add a pretty good
> receiver at say 30K, you are talking 230K to 280K total system noise, and
> the sun is probably around 800K with a low end 4 bay EME antenna setup
> (Gain~22dBi), for a noise rise of 10*log((800+255)/255) or 16dB.
>
> A single yagi of gain around 15dBi is much poorer, not only is the sun
> noise reduced proportionately to the gain reduction, but the ambient
> noise increases with higher gain in the side and back area of the
> antenna, but it still should be possible to reliably 'see' the sun with a
> very good receiver.
>
> Ambient noise temperature for a beam at zero elevation here in suburbia
> varies from 1000K to 6000K depending on the day and time... so a very low
> temperature receiver is wasted for terrestrial contacts.
>
> Owen
>
> Owen

I would like to see what mods are made to the 221 to do that and also what kind of antenna system. I have a 221 I am using with a gasfet preamp in the shack that should be less than 1 db of noise fugure and about 20 db of gain. The antenna is a klm 22c and 75 feet of 9913 type of coax. I can just see some sun noise with the antenna aimed at the sun. It sure does not deflect the smeter several sunits. The antenna is on an azel mount. I am sure the system is working as I compaired it to an Icom 706 and another antenna that is mounted on a tower and I am getting about the differance in signal levels I would expect at the horizon.

888. Re: Cushcraft Vertical Trap Consistency - Is there a trick guys?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 14:46:47 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46d19253$0$31892$4c368faf@roadrunner.com>
Source record: 36903

"Kevin Hastings" <myfamilydotcom@hotmail.com> wrote in message
news:46ceeefb$0$4068$9a566e8b@news.aliant.net...
> I've spent 2 months or so of tweaking an older Cushcraft ATV-5 5-band
> vertical with a friend's MFJ analyser and have had this thing exactly
> where I want it several times now. After tightening things down and
> putting vinyl electrical tape on all traps and section joints (where it
> seemed to make sense) it would look fine for a few days to a week.
>
> Then the resonant points of some bands would shift up to no-man's band
> seemingly overnight and stay there. I suspected poor screw conections at
> the traps, and so have been adding a stainless steel pipe-clamp connection
> just above and below the trap for improved connection. Made things better
> I thought - now 1-2 bands are just out of whack again.
>
> There's always moisture inside the trap when I disassemble the thing, so
> I'm wondering if maybe I shouldn't be trying to tape up the traps at all -
> maybe they are retaining water or something that is affecting the
> capacitance. Each trap has a drain hole at the bottom, and the aliminium
> pole itself has drain holes every now and then that I'm trying not to
> interfere with.
>
> Is there a trick, or some practical experience here that you can share?
>
> I've had a lot of fun experimenting with this in any case, but winter's
> coming...
>
> Thanks,
>
> Kevin VE9-XYZ
> myfamilydotcom@hotmail.com
>
>

I take it you bought it used. I bought a couple of them before I realized
they were junk. I still buy them if I can get them cheap enough just for the
Aluminum and the mount.

Jimmie

889. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 14:53:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fas45k$g5r$1@news.albasani.net>
Source record: 36904

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

MORE:

http://www.theregister.co.uk/2007/08/23/broadband_over_power/

JS

890. OFDM, a key to rock solid BPL ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 15:30:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fas6ae$l85$1@news.albasani.net>
Source record: 36905

John Smith I wrote:
> ...

http://en.wikipedia.org/wiki/OFDM

JS

891. Re: LQQKing for 160m

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 16:02:17 UTC
From: Fred McKenzie <fmmck@aol.com>
Message-ID: <fmmck-9C81F4.12021726082007@nntp.aioe.org>
Source record: 36906

In article <c9udneMoaep-Yk3bnZ2dnUVZ_qiinZ2d@comcast.com>,
"John Doe" <hgorden@adelphia.net> wrote:

> I am LQQking for a Hustler 160m mobile coil and whip.

Howard-

I don't think there is a 160 Meter Hustler resonator currently
available. I don't know if they ever made one, or made a single-band
160 Meter mobile antenna.

I have a 160 Meter mobile antenna purchased several years ago from AES.
As I recall, it was NOT made by Hustler. I can't find any markings on
it that might tell who made it.

It is in a similar configuration to the Hustler with a resonator, except
using a much shorter mast below the coil. I suspect it would hit
highway overpasses if the coil and top parts were used on a Hustler mast!

Fred
K4DII

892. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 16:18:48 UTC
From: Jeff <jeff@local.host>
Message-ID: <46d1a7e7$0$1345$834e42db@reader.greatnowhere.com>
Source record: 36907

> I would like to see what mods are made to the 221 to do that and also what
> kind of antenna system. I have a 221 I am using with a gasfet preamp in
> the shack that should be less than 1 db of noise fugure and about 20 db
> of gain. The antenna is a klm 22c and 75 feet of 9913 type of coax. I
> can just see some sun noise with the antenna aimed at the sun. It sure
> does not deflect the smeter several sunits. The antenna is on an azel
> mount. I am sure the system is working as I compaired it to an Icom 706
> and another antenna that is mounted on a tower and I am getting about the
> differance in signal levels I would expect at the horizon.

The 75 feet of coax is your problem!!! What is the point of a 1dB NF preamp
with all that loss ahead of it? To see the benefit of the low noise figure
the amp must be before all that cable loss!!

73
Jeff
G8HUL

893. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 16:40:12 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13d3b7anfpvueb9@corp.supernews.com>
Source record: 36908

"Jeff" <jeff@local.host> wrote in message
news:46d1a7e7$0$1345$834e42db@reader.greatnowhere.com...
>> I would like to see what mods are made to the 221 to do that and also
>> what kind of antenna system. I have a 221 I am using with a gasfet
>> preamp in the shack that should be less than 1 db of noise fugure and
>> about 20 db of gain. The antenna is a klm 22c and 75 feet of 9913 type
>> of coax. I can just see some sun noise with the antenna aimed at the
>> sun. It sure does not deflect the smeter several sunits. The antenna is
>> on an azel mount. I am sure the system is working as I compaired it to
>> an Icom 706 and another antenna that is mounted on a tower and I am
>> getting about the differance in signal levels I would expect at the
>> horizon.
>
> The 75 feet of coax is your problem!!! What is the point of a 1dB NF
> preamp with all that loss ahead of it? To see the benefit of the low noise
> figure the amp must be before all that cable loss!!
>
> 73
> Jeff
> G8HUL

The coax only has a loss of 1 db for the length I am running it. I doubt
that at 2 meters I would see any benift of putting the preamp at the
antenna. It is as easy to get a 1 db or less noise figure at 2 meters as it
is to make any preamp and the 221 does need some help on the receiving side.
From the articals I have read the beam width of most any single antennas at
2 meters is wide enough the ground noise will override that ammount of loss.

894. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 16:55:37 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <dgiAi.76547$Fc.37424@attbi_s21>
Source record: 36909

> The coax only has a loss of 1 db for the length I am running it. I doubt
> that at 2 meters I would see any benift of putting the preamp at the
> antenna. It is as easy to get a 1 db or less noise figure at 2 meters as
> it is to make any preamp and the 221 does need some help on the receiving
> side.
> From the articals I have read the beam width of most any single antennas
> at 2 meters is wide enough the ground noise will override that ammount of
> loss.
>
>
Agreed. Your 1 dB preamp just became a 2 dB preamp and the visible ground temperature likely overrode either figure and by a good margin. I suspect the original poster with his S9 sun noise and "seeing" the Galactic plane was being a bit optimistic.

W4ZCB

895. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 17:15:31 UTC
From: "Damn Ham"@yahoo.com
Message-ID: <a5d3d3do32gua9co9tnr7kpac7i2ehn5am@4ax.com>
Source record: 36910

Perhaps the answer here is to only use the analyzer on bands that are not in active use at the time, like say Noon on 75 meters. I'm speaking of when propogation is dead on thise bands because of time of day.

Would the legality of it change? Probably not, but by doing it that way you would have minimized the possibility of intererfering with any other users that could hear you.

On Sat, 25 Aug 2007 19:42:26 -0400, Walter Maxwell <walt@w2du.com> wrote:

>On Sat, 25 Aug 2007 08:31:08 -0500, Bob Miller <NOSPAM@neosoft.com> wrote:
>
>>On Fri, 24 Aug 2007 18:50:30 -0700, Roy Lewallen <w7el@eznec.com>
>>wrote:
>>
>>>Bob Miller wrote:
>>>>
>>>> I have an Oak Hills Research WM-2 QRP Wattmeter, which includes a
>>>> 0-100 milliwatt scale.
>>>>
>>>> With an MFJ 269 Antenna Analyzer hooked to the transmitter side of the
>>>> wattmeter, and an MFJ dummy load hooked to the load side of the
>>>> wattmeter, I get a reading of 3 milliwatts forward, 0 milliwatts
>>>> reflected.
>>>>
>>>> Not sure whether the FCC is concerned with signals at the 3 milliwatt
>>>> level...
>>>
>>>Most if not all the part 15 rules are defined in terms of field
>>>strength, not power. 3 mW is way, way more than enough to exceed some of
>>>the limits on some frequencies, when connected to even a poor antenna.
>>>For example, Part 15 shows, in 15.209, that intentional radiators aren't
>>>allowed to produce a field strength greater than 100 uV/m (with
>>>exceptions) at 3 meters from 30 - 88 Mhz. 3 milliwatts will produce
>>>*1,000 times*, or 60 dB greater than, this amount when connected to an
>>>isotropic antenna. Hook it to a dipole to get another few dB. The limit
>>>for class A digital devices (one class of unintentional radiators) is
>>>the same in that range, according to 15.109. So don't think that just
>>>because you consider a signal to be QRP that it's legal.
>>
>>FYI, I checked the MFJ-269 manual, and it claims: "a relatively pure
>>(harmonics better than -25dBc) signal of approximately 3 Vpp
>>(aproximately 20 milliwatts) into 50 ohms."

>>
>>So my measurement of 3 milliwatts on the wattmeter could have been
>>low.
>>
>>Bob
>>k5qwg
>>
>>
>>>
>>>That said, I agree that chances of prosecution are zero for using these
>>>devices unless serious and/or intentional interference results. And I
>>>strongly agree with the folks who have said that the last thing you want
>>>to do is force a specific ruling on the matter from the FCC.
>>>
>>>Roy Lewallen, W7EL
>
>During the 1960's I engineered the antenna systems that flew on the early TIROS weather satellites. The
>antennas radiated both RHCP and LHCP. In the earthward direction the gain was approximately 3 dBi. At the
>ground station I operated the antenna had a 16 dBd gain at the beacon frequency of 136 MHz The beacon xmtrs
>output power was 5 mW. While the satellite was at maximum slant range (just over the horizon) of 1800 miles,
>the signal level from the beacons was several dB over S9 on R-390 receivers with their associated frequency
>down converters.
>
>Walt,W2DU

896. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 18:39:55 UTC
From: Jeff <jeff@local.host>
Message-ID: <46d1c8f8$0$1347$834e42db@reader.greatnowhere.com>
Source record: 36911

```
"> The coax only has a loss of 1 db for the length I am running it. I doubt
> that at 2 meters I would see any benift of putting the preamp at the
> antenna. It is as easy to get a 1 db or less noise figure at 2 meters as
> it is to make any preamp and the 221 does need some help on the receiving
> side.
> From the articals I have read the beam width of most any single antennas
> at 2 meters is wide enough the ground noise will override that ammount of
> loss.
>

I think 1dB is a little optimistic for 75' of 9913 coax, it is in reality, I
suspect, nearer 1.5dB.

Any loss ahead of your preamp adds directly to the noise figure of the
system so the best NF that you could ever have is 2.5dB plus a little form
the 221.
Also 20dB of gain in the preamp sounds like a sure way to produce intermods
in your radio.

Regards
Jeff
```

897. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 19:18:24 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <4mkAi.59515$Xa3.5320@attbi_s22>
Source record: 36912

> I think 1dB is a little optimistic for 75' of 9913 coax, it is in reality,
> I
> suspect, nearer 1.5dB.
>
> Any loss ahead of your preamp adds directly to the noise figure of the
> system so the best NF that you could ever have is 2.5dB plus a little form
> the 221.
> Also 20dB of gain in the preamp sounds like a sure way to produce
> intermods in your radio.
>
> Regards
> Jeff
>

Well of course it is Jeff, but in moonbounce, noise figure is the holy grail. There weren't as many folks on 432 and moonbounce in particular back in 1979, but I NEVER was plagued with intermod off the moon, and the directivity of the array kept me from having any from anywhere else.

W4ZCB

898. Re: LQQKing for 160m

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 19:43:11 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <G9udnQly9ZgeRUzbnZ2dnUVZ_vShnZ2d@giganews.com>
Source record: 36913

Fred McKenzie wrote:
> Howard wrote:
>
> > I am LQQking for a Hustler 160m mobile coil and whip.
>
> Howard-
>
> I don't think there is a 160 Meter Hustler resonator currently
> available. I don't know if they ever made one, or made a single-band
> 160 Meter mobile antenna.
>
> I have a 160 Meter mobile antenna purchased several years ago from AES.
> As I recall, it was NOT made by Hustler. I can't find any markings on
> it that might tell who made it.
>
> It is in a similar configuration to the Hustler with a resonator, except
> using a much shorter mast below the coil. I suspect it would hit
> highway overpasses if the coil and top parts were used on a Hustler mast!
>
> Fred
> K4DII

Hustler/Newtronics (http://www.new-tronics.com/) never made a resonator for 160m (I used to sell Hustler at the local ham radio emporium).
That said, there's no reason you can't modify the parts you *can* get and/or use an ATU with it. I've done just that with 80-10m parts & pieces. The whips are 0.1" diameter, and Larsen sells 49" and 64" tapered whips that are the same diameter at the bottom...

75m = 64" whip + reduce inductance on RM75
40m = 49" whip + reduce inductance on RM40
20m = 49" whip shortened to ~40" + RM15
I haven't yet tried anything special for 15m, but expect an RM10 or RM12 + longer whip will work.
10m = 49" whip + homebrew 3/8"-24 fem/1/4"-28 male adapter + ferrule & locknut (no loading coil)

Vy 73,
Bryan WA7PRC

899. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 20:21:22 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <b-ednSUHvOQ9fUzbnZ2dnUVZ_hqdnZ2d@bright.net>
Source record: 36914

Interesting numbers, Dave.

W8PIL and I published a paper in QST in the 60s that dealt with the noise into a receiver from extraterrestrial sources. For those numbers to be limiting, one needs to be well away from people and one needs an antenna that has a very large directivity. In the other hand, if your receiver is in space, its antenna is not pointed at earth, and you have an antenna with a moderate directivity, then the numbers we presented will limit SNR.

I was involved in the early measurements of the temperature of the moon with a two-frequency feed using an 85 foot dish. Two-frequency = resonate at two frequencies separated by 2 times the IF frequency so more "signal" could be acquired. VT front end using every scheme in the book. Today, with almost no design, an FET off-the-shelf would be much better.

What huge improvements I have seen in the NF of VHF and UHF amplifiers. However, the techniques for achieving low NF have not changed from the ideas contained in v18 of the MIT Radiation Lab series.

73, Mac N8TT
--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Owen Duffy" <none@no.where> wrote in message
news:Xns99986BE4624A7nonenowhere@61.9.191.5...
> Dave Oldridge <doldridg@leavethisoutshaw.ca> wrote in
> news:Xns9997DD271413doldridgsprintca@64.59.135.159:
>
> ...
> > I used to have an FT-221 tricked out with a hot front end. Solar
> > noise would run the S meter up to well over the S9 mark and you could
> > even see the galactic plane passing through the antenna pattern.
> > Needless to say, it heard well on terrestrial 2m SSB.
>
> That is no mean feat!
>
> I think ambient noise temperature at 144MHz for an antenna pointed at
> cold sky is somewhere around 200K to 250K, when you add a pretty good
> receiver at say 30K, you are talking 230K to 280K total system noise, and
> the sun is probably around 800K with a low end 4 bay EME antenna setup
> (Gain~22dBi), for a noise rise of 10*log((800+255)/255) or 16dB.
>
> A single yagi of gain around 15dBi is much poorer, not only is the sun
> noise reduced proportionately to the gain reduction, but the ambient
> noise increases with higher gain in the side and back area of the

> antenna, but it still should be possible to reliably 'see' the sun with a
> very good receiver.
>
> Ambient noise temperature for a beam at zero elevation here in suburbia
> varies from 1000K to 6000K depending on the day and time... so a very low
> temperature receiver is wasted for terrestrial contacts.
>
> Owen

900. Western Connecticut Hamfest

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 20:33:22 UTC
From: JimR <kd1yv6@notmyemail.com>
Message-ID: <il49q4-lo6.ln1@oneyv.dyndns.org>
Source record: 36915

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Make checks payable to CARA

901. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 21:24:15 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99994B4C287F5nonenowhere@61.9.191.5>
Source record: 36916

```
"Ralph Mowery" <rmowery28146@earthlink.net> wrote in
news:13d32g3ap8inida@corp.supernews.com:

>
> "Owen Duffy" <none@no.where> wrote in message
> news:Xns99986BE4624A7nonenowhere@61.9.191.5...
>> Dave Oldridge <doldridg@leavethisoutshaw.ca> wrote in
>> news:Xns9997DD271413doldridgsprintca@64.59.135.159:
>>
>> ...
>>> I used to have an FT-221 tricked out with a hot front end. Solar
>>> noise would run the S meter up to well over the S9 mark and you
>>> could even see the galactic plane passing through the antenna
>>> pattern. Needless to say, it heard well on terrestrial 2m SSB.

Firstly, this was actually Howard's statement.

>>
>> That is no mean feat!

And my comment.

>>
>> I think ambient noise temperature at 144MHz for an antenna pointed at
>> cold sky is somewhere around 200K to 250K, when you add a pretty good
>> receiver at say 30K, you are talking 230K to 280K total system noise,
>> and the sun is probably around 800K with a low end 4 bay EME antenna
>> setup (Gain~22dBi), for a noise rise of 10*log((800+255)/255) or
>> 16dB.
>>
>> A single yagi of gain around 15dBi is much poorer, not only is the
>> sun noise reduced proportionately to the gain reduction, but the
>> ambient noise increases with higher gain in the side and back area of
>> the antenna, but it still should be possible to reliably 'see' the
>> sun with a very good receiver.
>>
>> Ambient noise temperature for a beam at zero elevation here in
>> suburbia varies from 1000K to 6000K depending on the day and time...
>> so a very low temperature receiver is wasted for terrestrial
>> contacts.
>>
>> Owen
>>
>> Owen
>
> I would like to see what mods are made to the 221 to do that and also
```

> what kind of antenna system. I have a 221 I am using with a gasfet
> preamp in the shack that should be less than 1 db of noise fugure and
> about 20 db of gain. The antenna is a klm 22c and 75 feet of 9913
> type of coax. I can just see some sun noise with the antenna aimed at
> the sun. It sure does not deflect the smeter several sunits. The
> antenna is on an azel mount. I am sure the system is working as I
> compaired it to an Icom 706 and another antenna that is mounted on a
> tower and I am getting about the differance in signal levels I would
> expect at the horizon.
>
>

So, lets take some guesses about things here. FT221 native NF ~8dB, line loss 0.2dB, preamp 1dB NF, 20dB gain, 9913 loss 1.2dB (75', load end VSWR 1.5). On my reckoning, Teq at antenna connector is 200K. The antenna is I understand a 22 element crossed Yagi, let's assign it 15dBi for the purposes of discussion.

Looking back at the earlier scenario, ambient (cold sky and earth) of 225K (ignoring the prospect of worse spillover with the smaller antenna) and sun noise of 160K, sun noise rise would be (225+200+160)/(225+200) or 1.4dB. That is not going to be very noticeable on an S meter.

O&OE!!!

At higher points in the solar cycle or if the sun is disturbed, the rise will be greater, but genuine quiet sun measurements should not capture disturbed sun, should they? Antennas more sensitive off the back / sides will be worse.

In that scenario, moving the preamp to the antenna would improve G/T from -11.3dB to -10.1, yielding a 1.2dB improvement in S/N ratio. At zero elevation, the ambient noise is typically much higher and the improvement would be much less.

Ambient noise is pretty easy to measure on 144MHz in a simple station. If you know the noise figure of your receiver and loss to the antenna, and providing ambient noise is not sufficient to cause AGC, note the audio power output change between antenna and a dummy load, you can calculate the ambient noise, see http://www.vk1od.net/sc/anc.htm for more information. In fact, with this tool, I can measure the change in audio output on my TS2000 by switching the internal 12.1dB attenuator in, and calculate Ta (try Example 3).

I hear sun noise rise bragged about, but the bragger often cannot quote the solar flux prevailing at the time, in which case it is rather meaningless, especially when their method is to capture the largest rise rather than largest minimum rise whithout artificial compression.

The reason I wrote the online calculator is that a number of people I have discussed sun noise rise with were using solar flux figures that were old and / or the wrong frequency.

Owen

902. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 21:28:21 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99994BFE0BEE5nonenowhere@61.9.191.5>
Source record: 36917

"Harold E. Johnson" <W4ZCB@mchsi.com> wrote in
news:4mkAi.59515$Xa3.5320@attbi_s22:

> Well of course it is Jeff, but in moonbounce, noise figure is the holy
> grail.

Is it?

Knowing G/T allows you to calculate the S/N ratio for a known incoming power flux density. Better, improvement in G/T ratio yields exactly the same improvement in S/N.

You cannot do that with NF alone, so it is not a single metric that characterises receive performance of a station.

Moonbouncers who focus on NF alone are as blinkered as anyone else who does that.

Owen

903. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 21:55:35 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns999897D777889doldridgsprintca@64.59.135.159>
Source record: 36918

Owen Duffy <none@no.where> wrote in
news:Xns99986BE4624A7nonenowhere@61.9.191.5:

> Dave Oldridge <doldridg@leavethisoutshaw.ca> wrote in
> news:Xns9997DD271413doldridgsprintca@64.59.135.159:
>
> ...
>> I used to have an FT-221 tricked out with a hot front end. Solar
>> noise would run the S meter up to well over the S9 mark and you could
>> even see the galactic plane passing through the antenna pattern.
>> Needless to say, it heard well on terrestrial 2m SSB.
>
> That is no mean feat!
>
> I think ambient noise temperature at 144MHz for an antenna pointed at
> cold sky is somewhere around 200K to 250K, when you add a pretty good
> receiver at say 30K, you are talking 230K to 280K total system noise,
> and the sun is probably around 800K with a low end 4 bay EME antenna
> setup (Gain~22dBi), for a noise rise of 10*log((800+255)/255) or 16dB.
>
> A single yagi of gain around 15dBi is much poorer, not only is the sun
> noise reduced proportionately to the gain reduction, but the ambient
> noise increases with higher gain in the side and back area of the
> antenna, but it still should be possible to reliably 'see' the sun
> with a very good receiver.
>
> Ambient noise temperature for a beam at zero elevation here in
> suburbia varies from 1000K to 6000K depending on the day and time...
> so a very low temperature receiver is wasted for terrestrial contacts.

This was a VERY quiet location. The only VHF stuff around was a bit of
156mhz and 161mhz stuff on a tower about 5 miles away. I could JUST see
the big tower downtown that most of the FM broadcast stations used, but
it was about 12 miles away and partially obscured by trees and a hill.
But to the south and west was mostly ocean. VERY quiet VHF location. One
time I worked a guy in a plane flying from St. Johns, Newfoundland to
Montreal, on 146.49 simplex FM. He just had a handheld in the cockpit
window and we stayed in contact (from my suburban Halifax location) from
the time he reached cruising altitude (30-some thousand) until he began
his descent into Montreal. The distance at the end of the QSO was
approaching 800 miles.

I did not notice any particular propagation that day, this was just plain
simplex FM. Now I was running about 600 watts at my end of the pipe, but
I could hear his handheld just fine.

Near as I could measure it, the NF of the receiver after my mod was
1.2db. I had to resort to boiling and freezing water and a tiny dummy
load to measure it at all.

--
Dave Oldridge+
ICQ 1800667

904. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 21:56:55 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns99989811823doldridgsprintca@64.59.135.159>
Source record: 36919

"Harold E. Johnson" <W4ZCB@mchsi.com> wrote in
news:ci5Ai.58746$Xa3.26736@attbi_s22:

>
>>> I used to have an FT-221 tricked out with a hot front end. Solar
>>> noise would run the S meter up to well over the S9 mark and you
>>> could even see the galactic plane passing through the antenna
>>> pattern. Needless to say, it heard well on terrestrial 2m SSB.
>>
>> That is no mean feat!
>
> You better believe no mean feat! I worked off the moon on 432 MHz back
> in the late 70's. Sixteen 16 element Yagis (calculated gain ~26 dB)
> and an STA from the FCC to use 5 KW as long as the antennas were
> pointed above 25 degrees elevation. (Protecting Eglin radars some 200
> plus miles away.)
>
> I could consistently manage some 4, 4-1/2 dB of sun noise off a quiet
> sun and not one smidge more even with a mast mounted GaAs Fet preamp
> supposedly with some 0.8 dB NF.
>
> I DID however, at around the same time, own a 2 meter Jap all-mode
> transceiver that I happened to measure the "S" meter accuracy with an
> HP signal generator. It turned out that 2 uVolts was "S"-1. THREE
> uVolts was "S"-9.

Yeah, and that just gets worse when you put a decent preamp in front of
it.

--
Dave Oldridge+
ICQ 1800667

905. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 22:02:23 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns999898FEEAB0Fdoldridgsprintca@64.59.135.159>
Source record: 36920

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in
news:13d32g3ap8inida@corp.supernews.com:

>
> "Owen Duffy" <none@no.where> wrote in message
> news:Xns99986BE4624A7nonenowhere@61.9.191.5...
>> Dave Oldridge <doldridg@leavethisoutshaw.ca> wrote in
>> news:Xns9997DD271413doldridgsprintca@64.59.135.159:
>>
>> ...
>>> I used to have an FT-221 tricked out with a hot front end. Solar
>>> noise would run the S meter up to well over the S9 mark and you
>>> could even see the galactic plane passing through the antenna
>>> pattern. Needless to say, it heard well on terrestrial 2m SSB.
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>> That is no mean feat!
>>
>> I think ambient noise temperature at 144MHz for an antenna pointed at
>> cold sky is somewhere around 200K to 250K, when you add a pretty good
>> receiver at say 30K, you are talking 230K to 280K total system noise,
>> and the sun is probably around 800K with a low end 4 bay EME antenna
>> setup (Gain~22dBi), for a noise rise of 10*log((800+255)/255) or
>> 16dB.
>>
>> A single yagi of gain around 15dBi is much poorer, not only is the
>> sun noise reduced proportionately to the gain reduction, but the
>> ambient noise increases with higher gain in the side and back area of
>> the antenna, but it still should be possible to reliably 'see' the
>> sun with a very good receiver.
>>
>> Ambient noise temperature for a beam at zero elevation here in
>> suburbia varies from 1000K to 6000K depending on the day and time...
>> so a very low temperature receiver is wasted for terrestrial
>> contacts.
>>
>> Owen
>>
>> Owen
>
> I would like to see what mods are made to the 221 to do that and also
> what kind of antenna system. I have a 221 I am using with a gasfet
> preamp in the shack that should be less than 1 db of noise fugure and
> about 20 db of gain. The antenna is a klm 22c and 75 feet of 9913
> type of coax. I can just see some sun noise with the antenna aimed at

> the sun. It sure does not deflect the smeter several sunits. The
> antenna is on an azel mount. I am sure the system is working as I
> compaired it to an Icom 706 and another antenna that is mounted on a
> tower and I am getting about the differance in signal levels I would
> expect at the horizon.

Well, the sun is much quieter nowadays than it was back then. When I had the station at its peak, I was running a single 19-element boomer at 85 feet, with boudle shielded Belden COAX. The preamp I was using was a mosfet, which, to the best of my measurement ability (none of the signal generators at work could come close to measuring it) gave it a 1.2db noise figure. Now there was probably also a 6db ground reflection gain from measuring the solar noise at the horizon (sunset or sunrise) and, as I say, it was a period when solar activity was high (6 meters was open to Mexico city a lot).

--
Dave Oldridge+
ICQ 1800667

906. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 22:03:54 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns999899408BAD5doldridgsprintca@64.59.135.159>
Source record: 36921

"Jeff" <jeff@local.host> wrote in
news:46d1a7e7$0$1345$834e42db@reader.greatnowhere.com:

>> I would like to see what mods are made to the 221 to do that and also
>> what kind of antenna system. I have a 221 I am using with a gasfet
>> preamp in the shack that should be less than 1 db of noise fugure
>> and about 20 db of gain. The antenna is a klm 22c and 75 feet of
>> 9913 type of coax. I can just see some sun noise with the antenna
>> aimed at the sun. It sure does not deflect the smeter several
>> sunits. The antenna is on an azel mount. I am sure the system is
>> working as I compaired it to an Icom 706 and another antenna that is
>> mounted on a tower and I am getting about the differance in signal
>> levels I would expect at the horizon.
>
> The 75 feet of coax is your problem!!! What is the point of a 1dB NF
> preamp with all that loss ahead of it? To see the benefit of the low
> noise figure the amp must be before all that cable loss!!

Yep...when I moved, I put in hardline and lowered the antenna a bunch.

That's when I started to hear other things besides the sun. And I could
plot it. When the galactic plane was in front of the antenna, the noise
floor would be up an S-unit from base.

--
Dave Oldridge+
ICQ 1800667

907. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 22:04:59 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns9998996F5A5Adoldridgsprintca@64.59.135.159>
Source record: 36922

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in
news:13d3b7anfpvueb9@corp.supernews.com:

>
> "Jeff" <jeff@local.host> wrote in message
> news:46d1a7e7$0$1345$834e42db@reader.greatnowhere.com...
>>> I would like to see what mods are made to the 221 to do that and
>>> also what kind of antenna system. I have a 221 I am using with a
>>> gasfet preamp in the shack that should be less than 1 db of noise
>>> fugure and about 20 db of gain. The antenna is a klm 22c and 75
>>> feet of 9913 type of coax. I can just see some sun noise with the
>>> antenna aimed at the sun. It sure does not deflect the smeter
>>> several sunits. The antenna is on an azel mount. I am sure the
>>> system is working as I compaired it to an Icom 706 and another
>>> antenna that is mounted on a tower and I am getting about the
>>> differance in signal levels I would expect at the horizon.
>>
>> The 75 feet of coax is your problem!!! What is the point of a 1dB NF
>> preamp with all that loss ahead of it? To see the benefit of the low
>> noise figure the amp must be before all that cable loss!!
>>
>> 73
>> Jeff
>> G8HUL
>
> The coax only has a loss of 1 db for the length I am running it. I
> doubt that at 2 meters I would see any benift of putting the preamp at
> the antenna. It is as easy to get a 1 db or less noise figure at 2
> meters as it is to make any preamp and the 221 does need some help on
> the receiving side. From the articals I have read the beam width of

Out of the box, the 221 had a noise figure somewhat north of 12db. I've
seen vacuum tube radios that were not much worse.

--
Dave Oldridge+
ICQ 1800667

908. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-26 22:26:59 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns999955EE72868nonenowhere@61.9.191.5>
Source record: 36923

Dave Oldridge <doldridg@leavethisoutshaw.ca> wrote in
news:Xns999897D777889doldridgsprintca@64.59.135.159:

> Near as I could measure it, the NF of the receiver after my mod was
> 1.2db. I had to resort to boiling and freezing water and a tiny dummy
> load to measure it at all.

I haven't tried hot/cold tests using ice and boiling water, I didn't think it was practical.

You finally measured a receiver noise temperature of 50K with hot and cold loads of 270 and 370.

That means a Y factor of 1.059dB.

If Y were just 0.1dB greater, NF would be 0.78dB, 0.1dB lower and, NF would be 1.66dB.

With this configuration the sensitivity of NF to changes in Y are extreme, 0.4dB change in NF per 0.1dB change in Y around that point.

If you made the Y measurements using the audio output of a narrow band receiver, it is very hard to make high resolution measurements (eg to 0.01dB resolution) with say, a multimeter.

I have done these tests with a liquid nitrogen cooled load and room temperature load, and that gives more practical Y ratios, 3.7dB for a 1.2dBNF, and the sensitivity in NF is 0.08dB per 0.1dB change in Y. This still demands high resolution measurement of noise power.

Owen

909. Antique 1912-1949 Porcelain teapot 528 chinaware 400 Website invitation visit

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 00:04:20 UTC
From: xjx_588@sohu.com
Message-ID: <1188173060.523532.25500@q4g2000prc.googlegroups.com>
Source record: 36924

Antique 1912-1949 Porcelain teapot 528 chinaware 400 Website
invitation visit
Website http://www.xjx588.com
E-mail xjx_588@tom.com
xjx_588@126.com
City Shengzhou Zhejiang China
Thanks !
Jianxiong Xu

910. Re: OFDM, a key to rock solid BPL ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 02:06:44 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99997B30CB78Dnonenowhere@61.9.191.5>
Source record: 36925

John Smith <assemblywizard@gmail.com> wrote in news:fas6ae$l85$1
@news.albasani.net:

> http://en.wikipedia.org/wiki/OFDM

Whilst OFDM is the modulation scheme most commonly used to try to work in the hostile environment that BPL must, it isn't magic, it might have many advantages in such an environment, but you still need to acheive S/N ratio over a substantial bandwidth to obtain the required speed to make it economical.

BPL transceivers work in a high noise environment, the power lines are polluted with noise that is to some extent limited by existing EMC standards. (In most jurisdictions, BPL modems must comply with existing EMC standards. Interestingly, one of our local test houses convinced themselves that BPL modems could be tested for EMC compliance with the carriers disables... but they didn't convince the regulator!)

The challenge for BPL developers is to achieve adequate S/N to meet their speed requirements in a noisy environment when their power levels are effectively limited by the same emission standards as the other polluters (eg plasma TVs). Essentially, they are not assured of adequate headroom to work properly now or in the future. An issue they must want to address.

There is no comfort for radio users in that challenge, because the current standards limiting emission are not designed to prevent interference, merely to reduce the risk of interference. If every metre of powerline radiated at the permitted limit for EMC, you can forget about ham radio as you knew it.

Owen

911. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 02:10:40 UTC
From: John Navas <spamfilter1@navasgroup.com>
Message-ID: <cjc4d394eqov9vbe8ogapsivbdgtg93ag9@4ax.com>
Source record: 36926
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

On Thu, 16 Aug 2007 11:29:19 -0700, Don Bowey <dbowey@comcast.net> wrote
in <C2E9E58F.73A63%dbowey@comcast.net>:

>On 8/16/07 7:29 AM, in article
>hbZwi.433778$p47.239378@bgtnsc04-news.ops.worldnet.att.net, "D Peter Maus"
><DPeterMaus@worldnet.att.net> wrote:

>> Guaranteed performance, you're right, is only 300 to 3600Hz,
>
>I can't think of even one US Telco that would (or could) guarantee that for
>a POTS line.

Check the spec.

--
Best regards, FAQ FOR CINGULAR WIRELESS:
John Navas <http://en.wikibooks.org/wiki/Cingular_Wireless_FAQ>

912. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 02:15:42 UTC
From: John Navas <spamfilter1@navasgroup.com>
Message-ID: <0uc4d3dsknukqndksdgqltqrge7oumrp7a@4ax.com>
Source record: 36927
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

```
On Thu, 16 Aug 2007 06:52:55 -0700, Don Bowey <dbowey@comcast.net> wrote
in <C2E9A4C7.739F3%dbowey@comcast.net>:

>On 8/15/07 11:07 PM, in article 0cq7c3def3f3rdpt56urvgf6c3ntekbk28@4ax.com,
>"John Navas" <spamfilter1@navasgroup.com> wrote:
>
>> On Thu, 19 Jul 2007 18:43:58 -0700, Don Bowey <dbowey@comcast.net> wrote
>> in <C2C5616E.700B1%dbowey@comcast.net>:
>>
>>> On 7/19/07 4:42 PM, in article 1mtv93ticddur8rq3tghsra57n9508mci0@4ax.com,
>>> "John Navas" <spamfilter1@navasgroup.com> wrote:
>>>
>>>> On Thu, 19 Jul 2007 14:45:00 GMT, jimp@specsol.spam.sux.com wrote in
>>>> <tp94n4-17l.ln1@mail.specsol.com>:
>>>>
>>>>> In rec.radio.amateur.antenna Radium <glucegen1@gmail.com> wrote:
>>>>
>>>>>> Digital cell phones should stop using the compression they use and
>>>>>> start using monaural WMA compression with a CBR of 20 kbps or less and
>>>>>> a sample rate of at least 44.1 KHz. In addition, the following must
>>>>>> also apply:
>>>>>
>>>>> The audio bandwidth of the phone system is about 3 KHz.
>>>>
>>>> Actually more like 10 KHz.
>>>
>>> If he is commenting on the bandwidth of a message network channel/circuit,
>>> including cellular, it is about 3 kHz.
>>
>> Audio. Suggest you read more carefully.
>
>Audio WHAT? Read what more carefully? Are you attempting to say the audio
>bandwidth of a message network channel is greater than about 3 kHz?

No. Suggest you read more carefully.

--
Best regards, FAQ FOR CINGULAR WIRELESS:
John Navas <http://en.wikibooks.org/wiki/Cingular_Wireless_FAQ>
```

913. Re: OFDM, a key to rock solid BPL ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 02:26:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fatcp0$mb1$1@news.albasani.net>
Source record: 36928

Owen Duffy wrote:
> ...
> Owen

I would be highly surprised if BPL ever becomes much more than a pawn in an attempt to keep major telcos/isps in check and an easy method to get the net in remote areas.

That said, 2+ million homes in the USA isn't really totally insignificant. I hold hope for the new 700 Mhz freqs being made free to all uses/devices/internet-suppliers ... this is where joe-blow-internet-user really will reap benefits.

However, there is always that unknown wild card which can change the whole game and at any moment, coming out of left field and in the blink of an eye!

Regards,
JS

914. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 02:31:41 UTC
From: John Navas <spamfilter1@navasgroup.com>
Message-ID: <spd4d39jcfqoeubml2ssc4pniml8kelgu4@4ax.com>
Source record: 36929
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

```
On Thu, 16 Aug 2007 20:29:12 +0900, "Brenda Ann" <brendad@shinbiro.com>
wrote in <ZeKdnXSDCIaYqFnbnZ2dnUVZ_hKdnZ2d@giganews.com>:

>"John Navas" <spamfilter1@navasgroup.com> wrote in message
>news:0cq7c3def3f3rdpt56urvgf6c3ntekbk28@4ax.com...
>> On Thu, 19 Jul 2007 18:43:58 -0700, Don Bowey <dbowey@comcast.net> wrote
>> in <C2C5616E.700B1%dbowey@comcast.net>:
>>
>>>On 7/19/07 4:42 PM, in article 1mtv93ticddur8rq3tghsra57n9508mci0@4ax.com,
>>>"John Navas" <spamfilter1@navasgroup.com> wrote:
>>>
>>>> On Thu, 19 Jul 2007 14:45:00 GMT, jimp@specsol.spam.sux.com wrote in
>>>> <tp94n4-17l.ln1@mail.specsol.com>:
>>>>
>>>>> In rec.radio.amateur.antenna Radium <glucegen1@gmail.com> wrote:
>>>>
>>>>>> Digital cell phones should stop using the compression they use and
>>>>>> start using monaural WMA compression with a CBR of 20 kbps or less and
>>>>>> a sample rate of at least 44.1 KHz. In addition, the following must
>>>>>> also apply:
>>>>>
>>>>> The audio bandwidth of the phone system is about 3 KHz.
>>>>
>>>> Actually more like 10 KHz.
>>>
>>>If he is commenting on the bandwidth of a message network channel/circuit,
>>>including cellular, it is about 3 kHz.
>>
>> Audio. Suggest you read more carefully.

>POTS phone lines are very limited. IIRC from my work with those systems,
>about 300-3600 Hz. Strictly human voice range, not meant for hi-fi. Special
>lines are still available for hi-fi use as audio STL's.

POTS lines are encoded at 64 Kbps, which is why V.90 modems work, and
which is sufficient for decent audio, albeit not "hi-fi".

--
Best regards, FAQ FOR CINGULAR WIRELESS:
John Navas <http://en.wikibooks.org/wiki/Cingular_Wireless_FAQ>
```

915. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 02:33:45 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1188182025.172229.321890@q4g2000prc.googlegroups.com>
Source record: 36930
Cross-posted to: sci.electronics.basics,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

On Aug 26, 7:15 pm, John Navas <spamfilt...@navasgroup.com> wrote:
> On Thu, 16 Aug 2007 06:52:55 -0700, Don Bowey <dbo...@comcast.net> wrote
> in <C2E9A4C7.739F3%dbo...@comcast.net>:
>
>
>
>
>
> >On 8/15/07 11:07 PM, in article 0cq7c3def3f3rdpt56urvgf6c3ntekb...@4ax.com,
> >"John Navas" <spamfilt...@navasgroup.com> wrote:
>
> >> On Thu, 19 Jul 2007 18:43:58 -0700, Don Bowey <dbo...@comcast.net> wrote
> >> in <C2C5616E.700B1%dbo...@comcast.net>:
>
> >>> On 7/19/07 4:42 PM, in article 1mtv93ticddur8rq3tghsra57n9508m...@4ax.com,
> >>> "John Navas" <spamfilt...@navasgroup.com> wrote:
>
> >>>> On Thu, 19 Jul 2007 14:45:00 GMT, j...@specsol.spam.sux.com wrote in
> >>>> <tp94n4-17l....@mail.specsol.com>:
>
> >>>>> In rec.radio.amateur.antenna Radium <gluceg...@gmail.com> wrote:
>
> >>>>>> Digital cell phones should stop using the compression they use and
> >>>>>> start using monaural WMA compression with a CBR of 20 kbps or less and
> >>>>>> a sample rate of at least 44.1 KHz. In addition, the following must
> >>>>>> also apply:
>
> >>>>> The audio bandwidth of the phone system is about 3 KHz.
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> >>>> Actually more like 10 KHz.
>
> >>> If he is commenting on the bandwidth of a message network channel/circuit,
> >>> including cellular, it is about 3 kHz.
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> >> Audio. Suggest you read more carefully.
>
> >Audio WHAT? Read what more carefully? Are you attempting to say the audio
> >bandwidth of a message network channel is greater than about 3 kHz?
>
> No. Suggest you read more carefully.
>
> --

> Best regards, FAQ FOR CINGULAR WIRELESS:
> John Navas <http://en.wikibooks.org/wiki/Cingular_Wireless_FAQ>- Hide quoted text -
>
> - Show quoted text -

Read More... Doh!

C a r e f u l l y . . . D O H !

916. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 03:32:56 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <7dSdnV8ropJY2E_bnZ2dnUVZ_g2dnZ2d@bright.net>
Source record: 36931

Dear Owen:
Others too may remember the use of a noise source comprising a gas tube crossways in a piece of waveguide (with 50 ohm probes) to estimate noise figure in the VT days. One would fire the gas tube and it was estimated to have a very large, "known" noise temp. Boiling water, while a known temp., would not have been hot enough.

Ice water was critical in the use of the HILLMS receiver used to measure absolute flux. The antenna was a very long horn antenna resting on the side of a deep gully. In those days, a horn antenna was one of the few antennas with a predictable gain. The receiver switched at a low frequency between the antenna and a load kept in ice water. The gain of the receiver was stabilized with a huge amount of negative feedback. Once a day, the source would pass through the antenna's beam and a strip chart recorder would indicate the difference between ice water and the source's temp.

Today, with much lower NF, and much more EM pollution, different techniques might be used.
73 Mac N8TT
--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Owen Duffy" <none@no.where> wrote in message

> Dave Oldridge <doldridg@leavethisoutshaw.ca> wrote in
>

>
> > Near as I could measure it, the NF of the receiver after my mod was
> > 1.2db. I had to resort to boiling and freezing water and a tiny dummy
> > load to measure it at all.

>
> I haven't tried hot/cold tests using ice and boiling water, I didn't
> think it was practical.
>
> You finally measured a receiver noise temperature of 50K with hot and
> cold loads of 270 and 370.
>
> That means a Y factor of 1.059dB.
>
> If Y were just 0.1dB greater, NF would be 0.78dB, 0.1dB lower and, NF
> would be 1.66dB.
>
> With this configuration the sensitivity of NF to changes in Y are
> extreme, 0.4dB change in NF per 0.1dB change in Y around that point.

>
> If you made the Y measurements using the audio output of a narrow band
> receiver, it is very hard to make high resolution measurements (eg to
> 0.01dB resolution) with say, a multimeter.
>
> I have done these tests with a liquid nitrogen cooled load and room
> temperature load, and that gives more practical Y ratios, 3.7dB for a
> 1.2dBNF, and the sensitivity in NF is 0.08dB per 0.1dB change in Y. This
> still demands high resolution measurement of noise power.
>
> Owen

917. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 03:44:53 UTC
From: Brenda Ann <brendad@shinbiro.com>
Message-ID: <UvCdncJlyIko1U_bnZ2dnUVZ_u6rnZ2d@giganews.com>
Source record: 36834
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

"John Navas" <spamfilter1@navasgroup.com> wrote in message
news:spd4d39jcfqoeubml2ssc4pniml8kelgu4@4ax.com...
>>POTS phone lines are very limited. IIRC from my work with those systems,
>>about 300-3600 Hz. Strictly human voice range, not meant for hi-fi.
>>Special
>>lines are still available for hi-fi use as audio STL's.
>
> POTS lines are encoded at 64 Kbps, which is why V.90 modems work, and
> which is sufficient for decent audio, albeit not "hi-fi".
>

POTS lines are not encoded at all. Hence "Plain Old Telephone Service" which
can be used with any telephone (ain't no decoders in a WE 500 deskset) that
uses a DC line.

918. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 04:02:42 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1188187362.923263.185430@q4g2000prc.googlegroups.com>
Source record: 36835
Cross-posted to: sci.electronics.basics,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

On Aug 26, 8:44 pm, "Brenda Ann" <bren...@shinbiro.com> wrote:
> "John Navas" <spamfilt...@navasgroup.com> wrote in message
>
> news:spd4d39jcfqoeubml2ssc4pniml8kelgu4@4ax.com...
>
> >>POTS phone lines are very limited. IIRC from my work with those systems,
> >>about 300-3600 Hz. Strictly human voice range, not meant for hi-fi.
> >>Special
> >>lines are still available for hi-fi use as audio STL's.
>
> > POTS lines are encoded at 64 Kbps, which is why V.90 modems work, and
> > which is sufficient for decent audio, albeit not "hi-fi".
>
> POTS lines are not encoded at all. Hence "Plain Old Telephone Service" which
> can be used with any telephone (ain't no decoders in a WE 500 deskset) that
> uses a DC line.

POTS de PANS . . . DOH !

919. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 04:21:55 UTC
From: D Peter Maus <DPeterMaus@worldnet.att.net>
Message-ID: <DjsAi.465232$p47.314297@bgtnsc04-news.ops.worldnet.att.net>
Source record: 36836
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

Brenda Ann wrote:
> "John Navas" <spamfilter1@navasgroup.com> wrote in message
> news:spd4d39jcfqoeubml2ssc4pniml8kelgu4@4ax.com...
>>> POTS phone lines are very limited. IIRC from my work with those systems,
>>> about 300-3600 Hz. Strictly human voice range, not meant for hi-fi.
>>> Special
>>> lines are still available for hi-fi use as audio STL's.
>> POTS lines are encoded at 64 Kbps, which is why V.90 modems work, and
>> which is sufficient for decent audio, albeit not "hi-fi".
>>
>
> POTS lines are not encoded at all. Hence "Plain Old Telephone Service" which
> can be used with any telephone (ain't no decoders in a WE 500 deskset) that
> uses a DC line.
>
>
>

In the US, the telephone network has been digital since 1962. At the time of the conversion, there was a decision made to keep the instrument and the interface familiar to the user, so there is no conversion in the deskset, and the 'last mile' from the CO is still analogue with battery voltage as it always has been. But behind that interface, the network is digital.

Now, that 'last mile' analogue circuit can be VERY poor. In my area, a v.92 modem will only pass 14.4. While only a mile up the road, I was getting 53k+ on the same v.92 modem.

When the network was converted from analogue to digital, there were complaints that voices no longer sounded right and that some people didn't sound like themselves. The complaints reached suce a pitch that AT&T launched a PR campaign in which TV spots attempted to explain the change in the audio at the instrument. As was the style of the times, they didn't really explain anything, certainly nothing as technical as digital audio, but instead, they described, through narrative and animation, how a person speaking into a telephone would connect to the central hub, where a voice that was similar to the speaker's voice was selected, and sent on to the far end. That's why someone didn't sound like themeselves.

No one bought it, of course, what with AT&T's reputation, by that point...but it was a hilarious exercise in TelCo spin.

And paved the way for the explanation of 'Tru-Voice' 30 years later.

Yes, POTS lines are encoded. At the CO. The only thing POTS about a
POTS line is what sits on your desk, and a length of copper to the network.

920. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 04:25:28 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <C2F7A048.75060%dbowey@comcast.net>
Source record: 36837
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

On 8/26/07 7:10 PM, in article cjc4d394eqov9vbe8ogapsivbdgtg93ag9@4ax.com,
"John Navas" <spamfilter1@navasgroup.com> wrote:

> On Thu, 16 Aug 2007 11:29:19 -0700, Don Bowey <dbowey@comcast.net> wrote
> in <C2E9E58F.73A63%dbowey@comcast.net>:
>
>> On 8/16/07 7:29 AM, in article
>> hbZwi.433778$p47.239378@bgtnsc04-news.ops.worldnet.att.net, "D Peter Maus"
>> <DPeterMaus@worldnet.att.net> wrote:
>
>>> Guaranteed performance, you're right, is only 300 to 3600Hz,
>>
>> I can't think of even one US Telco that would (or could) guarantee that for
>> a POTS line.
>
> Check the spec.

Sure. Whose spec?

Ever notice the D4 bank filter cutoff frequencies? How about loaded cable
rolloff?

921. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 04:26:27 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <C2F7A083.75061%dbowey@comcast.net>
Source record: 36838
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

```
On 8/26/07 7:15 PM, in article 0uc4d3dsknukqndksdgqltqrge7oumrp7a@4ax.com,
"John Navas" <spamfilter1@navasgroup.com> wrote:

> On Thu, 16 Aug 2007 06:52:55 -0700, Don Bowey <dbowey@comcast.net> wrote
> in <C2E9A4C7.739F3%dbowey@comcast.net>:
>
>> On 8/15/07 11:07 PM, in article 0cq7c3def3f3rdpt56urvgf6c3ntekbk28@4ax.com,
>> "John Navas" <spamfilter1@navasgroup.com> wrote:
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>>> On Thu, 19 Jul 2007 18:43:58 -0700, Don Bowey <dbowey@comcast.net> wrote
>>> in <C2C5616E.700B1%dbowey@comcast.net>:
>>>
>>>> On 7/19/07 4:42 PM, in article 1mtv93ticddur8rq3tghsra57n9508mci0@4ax.com,
>>>> "John Navas" <spamfilter1@navasgroup.com> wrote:
>>>>
>>>>> On Thu, 19 Jul 2007 14:45:00 GMT, jimp@specsol.spam.sux.com wrote in
>>>>> <tp94n4-17l.ln1@mail.specsol.com>:
>>>>>
>>>>>> In rec.radio.amateur.antenna Radium <glucegen1@gmail.com> wrote:
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>>>>>> Digital cell phones should stop using the compression they use and
>>>>>> start using monaural WMA compression with a CBR of 20 kbps or less and
>>>>>> a sample rate of at least 44.1 KHz. In addition, the following must
>>>>>> also apply:
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>>>>>> The audio bandwidth of the phone system is about 3 KHz.
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>>>>> Actually more like 10 KHz.
>>>>
>>>> If he is commenting on the bandwidth of a message network channel/circuit,
>>>> including cellular, it is about 3 kHz.
>>>
>>> Audio. Suggest you read more carefully.
>>
>> Audio WHAT? Read what more carefully? Are you attempting to say the audio
>> bandwidth of a message network channel is greater than about 3 kHz?
>
> No. Suggest you read more carefully.

Suggest you kiss my ass.
```

922. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 04:28:27 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <C2F7A0FB.75062%dbowey@comcast.net>
Source record: 36839
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

On 8/26/07 7:31 PM, in article spd4d39jcfqoeubml2ssc4pniml8kelgu4@4ax.com,
"John Navas" <spamfilter1@navasgroup.com> wrote:

> On Thu, 16 Aug 2007 20:29:12 +0900, "Brenda Ann" <brendad@shinbiro.com>
> wrote in <ZeKdnXSDCIaYqFnbnZ2dnUVZ_hKdnZ2d@giganews.com>:
>
>> "John Navas" <spamfilter1@navasgroup.com> wrote in message
>> news:0cq7c3def3f3rdpt56urvgf6c3ntekbk28@4ax.com...
>>> On Thu, 19 Jul 2007 18:43:58 -0700, Don Bowey <dbowey@comcast.net> wrote
>>> in <C2C5616E.700B1%dbowey@comcast.net>:
>>>
>>>> On 7/19/07 4:42 PM, in article 1mtv93ticddur8rq3tghsra57n9508mci0@4ax.com,
>>>> "John Navas" <spamfilter1@navasgroup.com> wrote:
>>>>
>>>>> On Thu, 19 Jul 2007 14:45:00 GMT, jimp@specsol.spam.sux.com wrote in
>>>>> <tp94n4-17l.ln1@mail.specsol.com>:
>>>>>
>>>>>> In rec.radio.amateur.antenna Radium <glucegen1@gmail.com> wrote:
>>>>>>
>>>>>>> Digital cell phones should stop using the compression they use and
>>>>>>> start using monaural WMA compression with a CBR of 20 kbps or less and
>>>>>>> a sample rate of at least 44.1 KHz. In addition, the following must
>>>>>>> also apply:
>>>>>>
>>>>>> The audio bandwidth of the phone system is about 3 KHz.
>>>>>
>>>>> Actually more like 10 KHz.
>>>>
>>>> If he is commenting on the bandwidth of a message network channel/circuit,
>>>> including cellular, it is about 3 kHz.
>>>
>>> Audio. Suggest you read more carefully.
>
>> POTS phone lines are very limited. IIRC from my work with those systems,
>> about 300-3600 Hz. Strictly human voice range, not meant for hi-fi. Special
>> lines are still available for hi-fi use as audio STL's.
>
> POTS lines are encoded at 64 Kbps, which is why V.90 modems work, and
> which is sufficient for decent audio, albeit not "hi-fi".

Having said that, you have said nothing useful.

923. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 04:33:28 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <C2F7A228.75064%dbowey@comcast.net>
Source record: 36840
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

```
On 8/26/07 8:44 PM, in article
UvCdncJlyIko1U_bnZ2dnUVZ_u6rnZ2d@giganews.com, "Brenda Ann"
<brendad@shinbiro.com> wrote:

>
> "John Navas" <spamfilter1@navasgroup.com> wrote in message
> news:spd4d39jcfqoeubml2ssc4pniml8kelgu4@4ax.com...
>>> POTS phone lines are very limited. IIRC from my work with those systems,
>>> about 300-3600 Hz. Strictly human voice range, not meant for hi-fi.
>>> Special
>>> lines are still available for hi-fi use as audio STL's.
>>
>> POTS lines are encoded at 64 Kbps, which is why V.90 modems work, and
>> which is sufficient for decent audio, albeit not "hi-fi".
>>
>
> POTS lines are not encoded at all. Hence "Plain Old Telephone Service" which
> can be used with any telephone (ain't no decoders in a WE 500 deskset) that
> uses a DC line.
>

POTS lines that are on pair gain systems are, indeed, coded in the same
manner as is the message network. It has nothing to do with the phone, and
is transparent to the user. They may, however, not be coded to a full 64
kbit/s.
```

924. Re: LQQKing for 160m

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 05:47:48 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46d26580$0$16482$4c368faf@roadrunner.com>
Source record: 36841

"Bryan" <bryan.swadenerNOSPAM@comcast.net> wrote in message
news:G9udnQly9ZgeRUzbnZ2dnUVZ_vShnZ2d@giganews.com...
> Fred McKenzie wrote:
>> Howard wrote:
>>
>> > I am LQQking for a Hustler 160m mobile coil and whip.
>>
>> Howard-
>>
>> I don't think there is a 160 Meter Hustler resonator currently
>> available. I don't know if they ever made one, or made a single-band
>> 160 Meter mobile antenna.
>>
>> I have a 160 Meter mobile antenna purchased several years ago from AES.
>> As I recall, it was NOT made by Hustler. I can't find any markings on
>> it that might tell who made it.
>>
>> It is in a similar configuration to the Hustler with a resonator, except
>> using a much shorter mast below the coil. I suspect it would hit
>> highway overpasses if the coil and top parts were used on a Hustler mast!
>>
>> Fred
>> K4DII
>
> Hustler/Newtronics (http://www.new-tronics.com/) never made a resonator
> for
> 160m (I used to sell Hustler at the local ham radio emporium).
> That said, there's no reason you can't modify the parts you *can* get
> and/or
> use an ATU with it. I've done just that with 80-10m parts & pieces. The
> whips are 0.1" diameter, and Larsen sells 49" and 64" tapered whips that
> are
> the same diameter at the bottom...
>
> 75m = 64" whip + reduce inductance on RM75
> 40m = 49" whip + reduce inductance on RM40
> 20m = 49" whip shortened to ~40" + RM15
> I haven't yet tried anything special for 15m, but expect an RM10 or RM12 +
> longer whip will work.
> 10m = 49" whip + homebrew 3/8"-24 fem/1/4"-28 male adapter + ferrule &
> locknut (no loading coil)
>
> Vy 73,
> Bryan WA7PRC

>
>

What one be the input impedance of a 10ft loaded mobile antenna on 160M?!.
Gotta be less than 1 ohm.

Jimmie

925. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 08:14:43 UTC
From: Jeff <jeff@local.host>
Message-ID: <46d28828$0$1341$834e42db@reader.greatnowhere.com>
Source record: 36842

>> Any loss ahead of your preamp adds directly to the noise figure of the
>> system so the best NF that you could ever have is 2.5dB plus a little
>> form the 221.
>> Also 20dB of gain in the preamp sounds like a sure way to produce
>> intermods in your radio.
>>

>>
> Well of course it is Jeff, but in moonbounce, noise figure is the holy
> grail. There weren't as many folks on 432 and moonbounce in particular
> back in 1979, but I NEVER was plagued with intermod off the moon, and the
> directivity of the array kept me from having any from anywhere else.
>
> W4ZCB

Well that's the first FT221 I heard of working on 432MHz!! If you are talking about that band rather than 144MHz then the cable loss would have been far higher and the NF of the system much higher.

Having a preamp with a gain of 20dB right in front of the radio is just plain silly. Pre-amp gains should be kept as low as possible. They should have just sufficient gain so that their low noise figure defines the system noise figure. Any excess gain is wasted and just asking for large signal problems.

If NF was such a Holy Grail then why throw away a significant improvement by putting the preamp after the feeder any degrading the system NF by the feeder loss?

Jeff

926. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 08:39:28 UTC
From: Jeff <jeff@local.host>
Message-ID: <46d28df2$0$1348$834e42db@reader.greatnowhere.com>
Source record: 36843

> Out of the box, the 221 had a noise figure somewhat north of 12db. I've
> seen vacuum tube radios that were not much worse.
>

I have never seen an FT221 with a NF anywhere near that. They normally cone in at about 5-6dB as standard and about 1.5 with the Mutek front-end board fitted.

73
Jeff

927. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 10:44:28 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <c7MupCQMsq0GFASW@ifwtech.co.uk>
Source record: 36844

Jeff wrote:
>
>> Out of the box, the 221 had a noise figure somewhat north of 12db. I've
>> seen vacuum tube radios that were not much worse.
>>
>
>I have never seen an FT221 with a NF anywhere near that. They normally cone
>in at about 5-6dB as standard and about 1.5 with the Mutek front-end board
>fitted.

I'd agree with 5-6dB as much more typical, but more like 2-2.5dB when the muTek board is simply plugged in. Another 0.5dB can be gained by avoiding the card edge connector, and installing a direct coax link from the antenna relay onto the board.

As the person who designed the original FT221 board (which Chris Bartram at muTek re-engineered for production) I wore out two dial drives chasing 2m DX with that rig! But in all that time, I never saw S9 sun noise. The only time I've seen anything approaching that level, it has been from a major solar flare.

--

73 from Ian GM3SEK
http://www.ifwtech.co.uk/g3sek

928. Re: LQQKing for 160m

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 13:29:59 UTC
From: Spam Trap <bit-bucket@config.com>
Message-ID: <slrnfd5ken.eal.bit-bucket@shell.config.com>
Source record: 36845

On Sun, 26 Aug 2007 00:21:56 -0400, John Doe wrote:
> I am LQQking for a Hustler 160m mobile coil and whip.

Thanks for l377ing us know.

929. Re: LQQKing for 160m

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 14:24:47 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <P8BAi.30665$RX.23198@newssvr11.news.prodigy.net>
Source record: 36846

Jimmie D wrote:
> What one be the input impedance of a 10ft loaded mobile antenna on 160M?!.
> Gotta be less than 1 ohm.

The input impedance cannot be less than the ground
losses which are usually in the ballpark of 10 ohms.
My ARRL Antenna Book estimates the feedpoint
impedance at ~34 ohms with a radiation resistance
of ~0.2 ohms for an efficiency of ~0.6% using a
coil with a Q of 300 which is no doubt higher than
any Hustler coil. I hope John Doe likes 160m QRP -
100 watts in with less than 1/2 watt radiated.
--
73, Cecil http://www.w5dxp.com

930. 160m Stealth - (was- LQQKing for 160m)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 14:29:55 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <yOudnZ6iN5xBQk_bnZ2dnUVZ_gudnZ2d@comcast.com>
Source record: 36847

"John Doe" <hgorden@adelphia.net> wrote in message
news:c9udneMoaep-Yk3bnZ2dnUVZ_qiinZ2d@comcast.com...
>I am LQQking for a Hustler 160m mobile coil and whip.
>
> 73's Howard W3CQH
2 items

1] I have since found that Hustler did not make a 160m coil, but Pro-Am/Valor makes this item (VAL PHF160 = VALOR 160M 8' 3/8-24 WHP/PHF 160B) that I might be able to substitute in its stead.

2] I live in a Antenna restricted community, and I have a 40ft pine tree in my back yard. I thought that I might try the above mentioned item in conjunction with lets say a "LDG AT-200 Pro" auto-tuner or equivalent. (Note - I cannot run any wires from the house to the tree in the air - they have to be buried. Also I do not have any fencing and my rain gutters are grounded.)

My idea is to strap either a metal or pvc painted pole near the top of the tree, with a mount bracket for the whip (of course all painted to look like the tree). I will have to feed it with RG-8x (painted) run down the tree and buried in a trench to the house.

As far as radials go - They are out of the question. Instead - what do you think if I should just roll up say 250ft of 13ga or so of single conductor wire about a foot in diameter, attached at the base of the mounting bracket (hung in the tree) and use it as a counterpoise? I might be able to hang in the lower branches of the tree - a waterproof box with a loading coil and attach the counterpoise there instead?

If I could tune TX/RX with this configuration, then I could possibly use it to cover all of the HF bands.

Of course, I would like to work DX, but if not possible, then at least conus.

Comments welcomed.

73's Howard, W3CQH

931. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 14:49:47 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <C2F8329B.750BE%dbowey@comcast.net>
Source record: 36848
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

On 8/26/07 9:21 PM, in article
DjsAi.465232$p47.314297@bgtnsc04-news.ops.worldnet.att.net, "D Peter Maus"
<DPeterMaus@worldnet.att.net> wrote:

> Brenda Ann wrote:
>> "John Navas" <spamfilter1@navasgroup.com> wrote in message
>> news:spd4d39jcfqoeubml2ssc4pniml8kelgu4@4ax.com...
>>>> POTS phone lines are very limited. IIRC from my work with those systems,
>>>> about 300-3600 Hz. Strictly human voice range, not meant for hi-fi.
>>>> Special
>>>> lines are still available for hi-fi use as audio STL's.
>>> POTS lines are encoded at 64 Kbps, which is why V.90 modems work, and
>>> which is sufficient for decent audio, albeit not "hi-fi".
>>>
>>
>> POTS lines are not encoded at all. Hence "Plain Old Telephone Service" which
>> can be used with any telephone (ain't no decoders in a WE 500 deskset) that
>> uses a DC line.
>>
>>
>>
>
>
>
> In the US, the telephone network has been digital since 1962. At the
> time of the conversion, there was a decision made to keep the instrument
> and the interface familiar to the user, so there is no conversion in the
> deskset, and the 'last mile' from the CO is still analogue with battery
> voltage as it always has been. But behind that interface, the network is
> digital.
>
> Now, that 'last mile' analogue circuit can be VERY poor. In my area,
> a v.92 modem will only pass 14.4. While only a mile up the road, I was
> getting 53k+ on the same v.92 modem.
>
> When the network was converted from analogue to digital, there were
> complaints that voices no longer sounded right and that some people
> didn't sound like themselves. The complaints reached suce a pitch that
> AT&T launched a PR campaign in which TV spots attempted to explain the
> change in the audio at the instrument. As was the style of the times,
> they didn't really explain anything, certainly nothing as technical as
> digital audio, but instead, they described, through narrative and

> animation, how a person speaking into a telephone would connect to the
> central hub, where a voice that was similar to the speaker's voice was
> selected, and sent on to the far end. That's why someone didn't sound
> like themeselves.
>
> No one bought it, of course, what with AT&T's reputation, by that
> point...but it was a hilarious exercise in TelCo spin.
>
> And paved the way for the explanation of 'Tru-Voice' 30 years later.
>
> Yes, POTS lines are encoded. At the CO. The only thing POTS about a
> POTS line is what sits on your desk, and a length of copper to the network.
>

You ignored pair-gain multiplexing in the Exchange Plant, which uses the
same codecs as are used in the message network.

932. Re: LQQKing for 160m

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 15:01:29 UTC
From: Technophobe <news@g4elp.demon.co.uk>
Message-ID: <faup04$dm0$1$8300dec7@news.demon.co.uk>
Source record: 36849

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:P8BAi.30665$RX.23198@newssvr11.news.prodigy.net...
> Jimmie D wrote:
>> What one be the input impedance of a 10ft loaded mobile antenna on
>> 160M?!. Gotta be less than 1 ohm.
>
> The input impedance cannot be less than the ground
> losses which are usually in the ballpark of 10 ohms.
> My ARRL Antenna Book estimates the feedpoint
> impedance at ~34 ohms with a radiation resistance
> of ~0.2 ohms for an efficiency of ~0.6% using a
> coil with a Q of 300 which is no doubt higher than
> any Hustler coil. I hope John Doe likes 160m QRP -
> 100 watts in with less than 1/2 watt radiated.
> --
> 73, Cecil http://www.w5dxp.com

If you just want to have 160 on the 80-10m base antenna then just add about
8ft of wire to the whip just above the coil. It ends up with about 40k
bandwidth. You lose 80 though.
I tried a mobile coil from a Proam whip to replace the 80m coil but it was
only 10k wide!!!! So I did the above.

I think you are talking about bobile antenna anyway so you could use another
make of coil as the threads semm to be all the same. but it is gojng to be
sharp!!
Cheers Dave

933. Re: Determining Ham-M series 1 or 2 from series 3-5

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 15:12:43 UTC
From: tclay@qmc.ph.msstate.edu
Message-ID: <86tzqlxb84.fsf@qmc.ph.msstate.edu>
Source record: 36851

>I already took the rotor apart once, to try to find some identifying marks
>on it to differentiate between Ham-M and Ham-II-IV, and had one hell of a
>time getting it back together... ended losing about four of the ball

The FAQ at Norm's Rotator service answers all of you questions:

http://www.rotorservice.com/faqs.htm

Tor
N4OGW

934. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 15:18:27 UTC
From: D Peter Maus <DPeterMaus@worldnet.att.net>
Message-ID: <7XBAi.56423$ax1.18643@bgtnsc05-news.ops.worldnet.att.net>
Source record: 36850
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

```
Don Bowey wrote:
> On 8/26/07 9:21 PM, in article
> DjsAi.465232$p47.314297@bgtnsc04-news.ops.worldnet.att.net, "D Peter Maus"
> <DPeterMaus@worldnet.att.net> wrote:
>
>> Brenda Ann wrote:
>>> "John Navas" <spamfilter1@navasgroup.com> wrote in message
>>> news:spd4d39jcfqoeubml2ssc4pniml8kelgu4@4ax.com...
>>>>> POTS phone lines are very limited. IIRC from my work with those systems,
>>>>> about 300-3600 Hz. Strictly human voice range, not meant for hi-fi.
>>>>> Special
>>>>> lines are still available for hi-fi use as audio STL's.
>>>> POTS lines are encoded at 64 Kbps, which is why V.90 modems work, and
>>>> which is sufficient for decent audio, albeit not "hi-fi".
>>>>
>>> POTS lines are not encoded at all. Hence "Plain Old Telephone Service" which
>>> can be used with any telephone (ain't no decoders in a WE 500 deskset) that
>>> uses a DC line.
>>>
>>>
>>>
>>
>>
>> In the US, the telephone network has been digital since 1962. At the
>> time of the conversion, there was a decision made to keep the instrument
>> and the interface familiar to the user, so there is no conversion in the
>> deskset, and the 'last mile' from the CO is still analogue with battery
>> voltage as it always has been. But behind that interface, the network is
>> digital.
>>
>> Now, that 'last mile' analogue circuit can be VERY poor. In my area,
>> a v.92 modem will only pass 14.4. While only a mile up the road, I was
>> getting 53k+ on the same v.92 modem.
>>
>> When the network was converted from analogue to digital, there were
>> complaints that voices no longer sounded right and that some people
>> didn't sound like themselves. The complaints reached suce a pitch that
>> AT&T launched a PR campaign in which TV spots attempted to explain the
>> change in the audio at the instrument. As was the style of the times,
>> they didn't really explain anything, certainly nothing as technical as
>> digital audio, but instead, they described, through narrative and
>> animation, how a person speaking into a telephone would connect to the
```

>> central hub, where a voice that was similar to the speaker's voice was
>> selected, and sent on to the far end. That's why someone didn't sound
>> like themeselves.
>>
>> No one bought it, of course, what with AT&T's reputation, by that
>> point...but it was a hilarious exercise in TelCo spin.
>>
>> And paved the way for the explanation of 'Tru-Voice' 30 years later.
>>
>> Yes, POTS lines are encoded. At the CO. The only thing POTS about a
>> POTS line is what sits on your desk, and a length of copper to the network.
>>
>
> You ignored pair-gain multiplexing in the Exchange Plant, which uses the
> same codecs as are used in the message network.
>

Um.....no, actually, I didn't.

935. Re: 160m Stealth - (was- LQQKing for 160m)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 15:34:02 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <K9CAi.395$FO2.347@newssvr14.news.prodigy.net>
Source record: 36852

John Doe wrote:
> 2] I live in a Antenna restricted community, and I have a 40ft pine tree
> in my back yard.

Now you are getting somewhere. Run a 40 foot vertical wire
up the tree and use some of the upper limbs for a top hat
made out of small wires. Feed it at the base of the tree
with an autotuner. A 40 foot vertical will radiate ten
times as much RF on 160m as will a 10 foot vertical.
The addition of top hat wires can double that figure.
You may get such an antenna to be 10% efficient.

> As far as radials go - They are out of the question.

At the autotuner, you need a counterpoise of some kind
unless you live in a salt water swamp. If you can bury
coax, can you also bury a 100 foot counterpoise? Note
that the ground causes the counterpoise to have a low
velocity factor so 1/4WL of wire is not necessary.
--
73, Cecil http://www.w5dxp.com

936. Re: LQQKing for 160m

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 15:40:38 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46d2f072$0$18810$4c368faf@roadrunner.com>
Source record: 36853

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:P8BAi.30665$RX.23198@newssvr11.news.prodigy.net...
> Jimmie D wrote:
>> What one be the input impedance of a 10ft loaded mobile antenna on
>> 160M?!. Gotta be less than 1 ohm.
>
> The input impedance cannot be less than the ground
> losses which are usually in the ballpark of 10 ohms.
> My ARRL Antenna Book estimates the feedpoint
> impedance at ~34 ohms with a radiation resistance
> of ~0.2 ohms for an efficiency of ~0.6% using a
> coil with a Q of 300 which is no doubt higher than
> any Hustler coil. I hope John Doe likes 160m QRP -
> 100 watts in with less than 1/2 watt radiated.
> --
> 73, Cecil http://www.w5dxp.com

Maybe thats why Hustler never marketed such a coil.

Jimmie

937. Re: OFDM, a key to rock solid BPL ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 15:46:55 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <iKKdnX97g_pUbE_bnZ2dneKdnZyinZ2d@pipex.net>
Source record: 36854

```
> The latter is about the last thing BPL will ever be. It's far too
> expensive to serve remote areas with BPL and the story that it will
> bring high speed Internet to rural areas is little more than BPL's big
> lie.
==========================
Instead of BPL ,would it not be viable for power companies to run fibre
along overhead power wires and provide true HS broadband
this way .
Fibre is non-conductive and hence appropriate in a HV environment.

Frank GM0CSZ / KN6WH
```

938. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 15:51:32 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <C2F84114.7512D%dbowey@comcast.net>
Source record: 36855
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

On 8/27/07 8:18 AM, in article
7XBAi.56423$ax1.18643@bgtnsc05-news.ops.worldnet.att.net, "D Peter Maus"
<DPeterMaus@worldnet.att.net> wrote:

> At the CO.

How about the one at the pair-gain terminal that you forgot?

939. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 15:54:08 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46d2f39c$0$16469$4c368faf@roadrunner.com>
Source record: 36856

"Bob Miller" <NOSPAM@neosoft.com> wrote in message
news:e72uc3920roulhe6n9qc5vm9nah6jjdghb@4ax.com...
> On Wed, 22 Aug 2007 21:37:06 GMT, "Thomas Magma"
> <somewhere@overtherainbow.com> wrote:
>
>>Hi,
>>
>>I'm trying to determine if using an antenna analyzer is technically a
>>violation of the telecommunications Code of Federal Regulations. Typical
>>antenna analyzers inject a incident CW or sweeping CW to the antenna and
>>measure its return loss (reflection). Very few frequency bands have a CW
>>or
>>sweeping CW as their allowed modulation type. The way I see it is that by
>>using an antenna analyzer you are intentionally radiating an improper
>>modulation type that was allocated for the band and therefore you are in
>>violation of the Code of Federal Regulations.
>>
>>Anyone have any thoughts on this topic?
>>
>>Thomas Magma
>>
>
> I have an Oak Hills Research WM-2 QRP Wattmeter, which includes a
> 0-100 milliwatt scale.
>
> With an MFJ 269 Antenna Analyzer hooked to the transmitter side of the
> wattmeter, and an MFJ dummy load hooked to the load side of the
> wattmeter, I get a reading of 3 milliwatts forward, 0 milliwatts
> reflected.
>
> Not sure whether the FCC is concerned with signals at the 3 milliwatt
> level...
>
> Bob
> k5qwg

I think I remember a test conducted to see how much power it would take to communicate across the United States coast to coast. They started out making the contact at near legal limit and were still able to detect the signal at just a few milliwatts. As I remember a few was less than 10. I am sure this was part of a ham magazine article from many years ago. perhaps someone else here knows the details better than I.

Jimmie

940. Re: OFDM, a key to rock solid BPL ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 16:43:27 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fauuvj$i6j$2@news.albasani.net>
Source record: 36857

Highland Ham wrote:

> ...
> Frank GM0CSZ / KN6WH

It is my understanding, only the last short distance to your home is copper, the rest is fiber. The generous telcos did this SO THAT YOU COULD KEEP THE PHONE YOU ARE USED TO (or this is the reason given by telcos, who limit bandwidth by such), except for small copper run, these lines are already fiber.

Too explain the above better:

When the telcos were faced with implementing the new fiber lines, from central offices outward, they decided to keep the very end tails of these runs copper. Their argument was based on the stated reason that they wanted to keep the end users phones of a design with which the public was familiar with (awww, they were thinking of us, NOT money! :-))--something I NEVER believed to this very day. But, though sheer coincidence, just happened to benefit the phone companies enormously.

BPL is here to stay--whether you like it or NOT and in one form or another. Manipulations far from our sight will drive this. An informed public might help, getting that informed public might take awhile. :-(

Regards,
JS

Regards,
JS

941. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 16:51:39 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <fauverjvv1@theodyn.ncf.ca>
Source record: 36858

"Jimmie D" (GFENDER@carolina.rr.com) writes:

> I think I remember a test conducted to see how much power it would take to
> communicate across the United States coast to coast. They started out making
> the contact at near legal limit and were still able to detect the signal at
> just a few milliwatts. As I remember a few was less than 10. I am sure this
> was part of a ham magazine article from many years ago. perhaps someone else
> here knows the details better than I.
>
Don't forget that the rise of QRP activity forty years ago came due
to the realization that you didn't always need high power.

ANd one subset of QRP is to try to communicate with as little power
as possible. Sometimes that was deliberate, dropping power until
the signal was no longer receivable at theother end.

Michael VE2BVW

942. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 16:59:08 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fauvt0$i6j$3@news.albasani.net>
Source record: 36859

Jimmie D wrote:

> ...
> I think I remember a test conducted to see how much power it would take to
> communicate across the United States coast to coast. They started out making
> the contact at near legal limit and were still able to detect the signal at
> just a few milliwatts. As I remember a few was less than 10. I am sure this
> was part of a ham magazine article from many years ago. perhaps someone else
> here knows the details better than I.
>
>
> Jimmie

It seems to me, many here have suggested there are "tons" of active hams out there; some have even went so far as to claim the bands are "crowded."

Surely, taking in to account the above, the few brief milliwatts from an analyzer are of no real consequence amongst this "rf pollution" ... and ten milliwatts would never make it across such a country of such active hams.

Regards,
JS

943. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 17:07:56 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <NxDAi.148739$zz2.93002@newsfe12.phx>
Source record: 36860

```
"Jimmie D" <GFENDER@carolina.rr.com> wrote in message
news:46d2f39c$0$16469$4c368faf@roadrunner.com...
>
> "Bob Miller" <NOSPAM@neosoft.com> wrote in message
> news:e72uc3920roulhe6n9qc5vm9nah6jjdghb@4ax.com...
>> On Wed, 22 Aug 2007 21:37:06 GMT, "Thomas Magma"
>> <somewhere@overtherainbow.com> wrote:
>>
>>>Hi,
>>>
>>>I'm trying to determine if using an antenna analyzer is technically a
>>>violation of the telecommunications Code of Federal Regulations. Typical
>>>antenna analyzers inject a incident CW or sweeping CW to the antenna and
>>>measure its return loss (reflection). Very few frequency bands have a CW
>>>or
>>>sweeping CW as their allowed modulation type. The way I see it is that by
>>>using an antenna analyzer you are intentionally radiating an improper
>>>modulation type that was allocated for the band and therefore you are in
>>>violation of the Code of Federal Regulations.
>>>
>>>Anyone have any thoughts on this topic?
>>>
>>>Thomas Magma
>>>
>>
>> I have an Oak Hills Research WM-2 QRP Wattmeter, which includes a
>> 0-100 milliwatt scale.
>>
>> With an MFJ 269 Antenna Analyzer hooked to the transmitter side of the
>> wattmeter, and an MFJ dummy load hooked to the load side of the
>> wattmeter, I get a reading of 3 milliwatts forward, 0 milliwatts
>> reflected.
>>
>> Not sure whether the FCC is concerned with signals at the 3 milliwatt
>> level...
>>
>> Bob
>> k5qwg
>
> I think I remember a test conducted to see how much power it would take to
> communicate across the United States coast to coast. They started out
> making the contact at near legal limit and were still able to detect the
> signal at just a few milliwatts. As I remember a few was less than 10. I
> am sure this was part of a ham magazine article from many years ago.
```

> perhaps someone else here knows the details better than I.
>
>
> Jimmie
>

Last year, I contacted a ham station in New York state - he was running 10 milliwatts !!!! I was running 5 Watts.
The band --- Six Meters

Lamont

944. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 17:18:51 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fav11r$u4n$1@news.jpl.nasa.gov>
Source record: 36863

Owen Duffy wrote:
> Dave Oldridge <doldridg@leavethisoutshaw.ca> wrote in
> news:Xns999897D777889doldridgsprintca@64.59.135.159:
>
>
>>Near as I could measure it, the NF of the receiver after my mod was
>>1.2db. I had to resort to boiling and freezing water and a tiny dummy
>>load to measure it at all.
>
>
> I haven't tried hot/cold tests using ice and boiling water, I didn't
> think it was practical.
>
> You finally measured a receiver noise temperature of 50K with hot and
> cold loads of 270 and 370.
>
> That means a Y factor of 1.059dB.
>
> If Y were just 0.1dB greater, NF would be 0.78dB, 0.1dB lower and, NF
> would be 1.66dB.
>
> With this configuration the sensitivity of NF to changes in Y are
> extreme, 0.4dB change in NF per 0.1dB change in Y around that point.
>
> If you made the Y measurements using the audio output of a narrow band
> receiver, it is very hard to make high resolution measurements (eg to
> 0.01dB resolution) with say, a multimeter.
>
> I have done these tests with a liquid nitrogen cooled load and room
> temperature load, and that gives more practical Y ratios, 3.7dB for a
> 1.2dBNF, and the sensitivity in NF is 0.08dB per 0.1dB change in Y. This
> still demands high resolution measurement of noise power.
>
> Owen

Indeed, this would be a very challenging measurement, because you also
have to take into account the match of that load, and if it's just a
resistor that you're plunging into hot and cold, its resistance will
almost certainly change. At microwave frequencies, a more common
technique for radiometers is to use a flat plate absorber that has been
characterized for changes in absorption over temperature.

One might want to take a look at how NIST does this kind of thing.
Here's the slides from a talk by Jim Randa
http://www.boulder.nist.gov/div818/81801/Noise/Talks/Noise%20Shrt%20Crs_06.pdf

he's a noise measurement guru at NIST.. check out the website:

http://www.boulder.nist.gov/div818/81801/Noise/

I've had a precision noise source (used to do Y factor measurements on a precision 13.402 GHz receiver) measured in their lab over a week. The measurement uncertainty (for a system with waveguide connections) was in the few Kelvins range (out of a noise power of 7000K or so), and the connect/reconnect uncertainty dominates. I doubt one could get this kind of performance with a coaxial connector (the uncertainty in the mismatch).

By the way, a good noise diode source is probably a better standard for the hot side than heating a resistor. They're very, very stable over time, once calibrated, and if properly designed, have a very stable match as the noise is turned on and off. (that's what we were using in the above system, a temperature controlled Noise/Com style source).

http://www.boulder.nist.gov/div818/81801/Noise/publications/01_Stability_IM.pdf
http://www.boulder.nist.gov/div818/81801/Noise/publications/00_Stability_CPEM.pdf

describes the performance

Another useful link might be:
http://www.boulder.nist.gov/div818/81801/Noise/publications/97_Amps_IM.pdf
D.F. Wait, J. Randa, "Amplifier Noise Measurements at NIST", IEEE Trans on Inst. and Meas., v.46, n.2, Apr 1997

They give measurement uncertainties of 0.04dB on a 0.5 dB NF for 2-4 GHz..

945. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 17:37:04 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <3ZDAi.24$7P7.9@newssvr19.news.prodigy.net>
Source record: 36861

Michael Black wrote:
> ANd one subset of QRP is to try to communicate with as little power
> as possible. Sometimes that was deliberate, dropping power until
> the signal was no longer receivable at theother end.

I've made solid PACTOR II contacts to Germany using
a 40 ft. high dipole with less than 5 watts. I could
not even hear the other signal.
--
73, Cecil http://www.w5dxp.com

946. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 17:41:56 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <E1EAi.9703$L_7.2430@newsfe16.phx>
Source record: 36862

```
"The Shadow" <Cranston@CobaltClub.com> wrote in message
news:NxDAi.148739$zz2.93002@newsfe12.phx...
>
> "Jimmie D" <GFENDER@carolina.rr.com> wrote in message
> news:46d2f39c$0$16469$4c368faf@roadrunner.com...
>>
>> "Bob Miller" <NOSPAM@neosoft.com> wrote in message
>> news:e72uc3920roulhe6n9qc5vm9nah6jjdghb@4ax.com...
>>> On Wed, 22 Aug 2007 21:37:06 GMT, "Thomas Magma"
>>> <somewhere@overtherainbow.com> wrote:
>>>
>>>>Hi,
>>>>
>>>>I'm trying to determine if using an antenna analyzer is technically a
>>>>violation of the telecommunications Code of Federal Regulations. Typical
>>>>antenna analyzers inject a incident CW or sweeping CW to the antenna and
>>>>measure its return loss (reflection). Very few frequency bands have a CW
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>>>>sweeping CW as their allowed modulation type. The way I see it is that
>>>>by
>>>>using an antenna analyzer you are intentionally radiating an improper
>>>>modulation type that was allocated for the band and therefore you are in
>>>>violation of the Code of Federal Regulations.
>>>>
>>>>Anyone have any thoughts on this topic?
>>>>
>>>>Thomas Magma
>>>>
>>>
>>> I have an Oak Hills Research WM-2 QRP Wattmeter, which includes a
>>> 0-100 milliwatt scale.
>>>
>>> With an MFJ 269 Antenna Analyzer hooked to the transmitter side of the
>>> wattmeter, and an MFJ dummy load hooked to the load side of the
>>> wattmeter, I get a reading of 3 milliwatts forward, 0 milliwatts
>>> reflected.
>>>
>>> Not sure whether the FCC is concerned with signals at the 3 milliwatt
>>> level...
>>>
>>> Bob
>>> k5qwg
>>
>> I think I remember a test conducted to see how much power it would take
```

>> to communicate across the United States coast to coast. They started out
>> making the contact at near legal limit and were still able to detect the
>> signal at just a few milliwatts. As I remember a few was less than 10. I
>> am sure this was part of a ham magazine article from many years ago.
>> perhaps someone else here knows the details better than I.
>>
>>
>> Jimmie
>>
>
> Last year, I contacted a ham station in New York state - he was running 10
> milliwatts !!!! I was running 5 Watts.
> The band --- Six Meters
>
> Lamont

Opppsss
I am in San Diego CA

947. Re: OFDM, a key to rock solid BPL ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 20:39:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <favcqlnmf1@news.albasani.net>
Source record: 36864

John Smith wrote:

> ...

Although it is implied in the above post, I failed to directly mention
telcos would be, most likely, the best choice to implement a
communications system (the business they are already in)--especially
since most of such a system is already in place.

JS

948. Re: OFDM, a key to rock solid BPL ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 20:54:02 UTC
From: gsm@mendelson.com
Message-ID: <slrnfd6ef3.kkn.gsm@cable.mendelson.com>
Source record: 36865

John Smith wrote:

> Although it is implied in the above post, I failed to directly mention
> telcos would be, most likely, the best choice to implement a
> communications system (the business they are already in)--especially
> since most of such a system is already in place.

Not only that, but they already charge you a tax to support their
their (supposedly) money loosing operations in sparsely populated
areas.

IMHO the real answers to BPL are to run fiber along the electric
right of way (which was done here), or to set up a WiMax MESH network
on power poles.

According to

http://www.wimax.com/education/faq/faq31

average network range would be 4-5 miles. More than enough for most places.
How many people are more than 4 miles from a power pole?

Performance would be good, but latency would be high, which precludes
VoIP, and real time video. It does work fine for web surfing, email
and background delivery of video programs (Democracy player type
systems instead of Joost).

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

949. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 23:02:06 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns999A5BE2FBD77nonenowhere@61.9.191.5>
Source record: 36866

Jim Lux <james.p.lux@jpl.nasa.gov> wrote in
news:fav11r$u4n$1@news.jpl.nasa.gov:

...
> Indeed, this would be a very challenging measurement, because you also
> have to take into account the match of that load, and if it's just a

Jim, an important point, and more generally on the mismatch issue...

It seems that many measuring sun noise rise prefer to measure the rise by attenuator substitution.

Though it seems a simple and sound method of measurement, the effects of mismatch need to be considered, not only on the power delivered to the receiver chain, but also the noise figure of the device with the changing input or output loads. The effects are not necessarily easy to quantify, which makes the apparently simple method a bit of a trap.

Owen

950. Re: OFDM, a key to rock solid BPL ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 23:16:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <favm0t$9oh$1@news.albasani.net>
Source record: 36867

Geoffrey S. Mendelson wrote:

> ...
> IMHO the real answers to BPL are to run fiber along the electric
> right of way (which was done here), or to set up a WiMax MESH network
> on power poles.
> ...
> Geoff.

I suppose a whole new communication/distribution system, relays, inline amps, etc., along with a whole new infrastructure to maintain and support the mess ... speaking about the USA--of course.

Frankly, the telcos, supposedly, have hardened/semi-hardened system to survive some level of EMP attack, and a complete communications system already in effect, maintaining lines is already done, etc., etc. ... it would be cheaper to just bring it out of the stone age and upgrade it to a user friendly level.

But hey, a whole other system would be great, if you don't mind the extravagant cost of such ... I am of the opinion that the internet should be like the public water system--available to everyone at a cost which even the impoverished can afford--easily.

Regards,
JS

951. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-27 23:21:30 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <1jm6d3lck6jbvfkdqnqk0ch4en8dbh32m0@4ax.com>
Source record: 36868

On Mon, 27 Aug 2007 23:02:06 GMT, Owen Duffy <none@no.where> wrote:

>> Indeed, this would be a very challenging measurement, because you also
>> have to take into account the match of that load, and if it's just a
>
>Jim, an important point, and more generally on the mismatch issue...

Hi All,

Given the notoriety that follows discussion about the Real component
of the transmitter's source Z....

Let's see, How do I measure thee, let me count the ways. Anyone want
to venture a guess on the value of the Real component of the receivers
load Z? (And then we game this into the S-9 50ï¿½V across those myriad
resistors.)

73's
Richard Clark, KB7QHC

952. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 00:41:25 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns9999B3F50E4E0doldridgsprintca@64.59.135.159>
Source record: 36869

Owen Duffy <none@no.where> wrote in news:Xns999955EE72868nonenowhere@
61.9.191.5:

> Dave Oldridge <doldridg@leavethisoutshaw.ca> wrote in
> news:Xns999897D777889doldridgsprintca@64.59.135.159:
>
>> Near as I could measure it, the NF of the receiver after my mod was
>> 1.2db. I had to resort to boiling and freezing water and a tiny dummy
>> load to measure it at all.
>
> I haven't tried hot/cold tests using ice and boiling water, I didn't
> think it was practical.

Only just and you need a good 4-digit or better AC voltmeter to do it at
all. I wasn't after accuracy, just a ball-park estimate and I know I got
it fairly close because the receiver did show a marked increase in noise
when any decent antenna was connected.

> You finally measured a receiver noise temperature of 50K with hot and
> cold loads of 270 and 370.
>
> That means a Y factor of 1.059dB.
>
> If Y were just 0.1dB greater, NF would be 0.78dB, 0.1dB lower and, NF
> would be 1.66dB.

Yep...the most I'd be willing to commit to with that measurement would be
that it was below around 2.5 and PROBABLY fairly close to my measurement.
I measured the voltages alternately 25 times and took a mean to try to
smooth out the errors.

> With this configuration the sensitivity of NF to changes in Y are
> extreme, 0.4dB change in NF per 0.1dB change in Y around that point.
>
> If you made the Y measurements using the audio output of a narrow band
> receiver, it is very hard to make high resolution measurements (eg to
> 0.01dB resolution) with say, a multimeter.

It is. You need a good AC voltmeter with decent digital accuracy and
resolution and you have to average a bunch of readings.

> I have done these tests with a liquid nitrogen cooled load and room
> temperature load, and that gives more practical Y ratios, 3.7dB for a
> 1.2dBNF, and the sensitivity in NF is 0.08dB per 0.1dB change in Y.
This
> still demands high resolution measurement of noise power.

Yes, anything less than 4 digits is just about useless.

--
Dave Oldridge+
ICQ 1800667

953. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 01:25:31 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns999A7433D7E10nonenowhere@61.9.191.5>
Source record: 36870

Dave Oldridge <doldridg@leavethisoutshaw.ca> wrote in
news:Xns9999B3F50E4E0doldridgsprintca@64.59.135.159:

> Owen Duffy <none@no.where> wrote in news:Xns999955EE72868nonenowhere@
> 61.9.191.5:
...
>> If you made the Y measurements using the audio output of a narrow
>> band receiver, it is very hard to make high resolution measurements
>> (eg to 0.01dB resolution) with say, a multimeter.
>
> It is. You need a good AC voltmeter with decent digital accuracy and
> resolution and you have to average a bunch of readings.

I put some notes together on a perspective of the noise measurement
(sampling) process and its statistical uncertainty, they are at
http://www.vk1od.net/fsm/nmu.htm .

It is my experience that a digital voltmeter probably samples for
something around 100ms, and with a 2kHz wide noise bandwidth, you might
expect an uncertainty of near 0.5dB at the 90% confidence level. Just
watch the readings bounce around.

Sure, if you average 100 of those measurements (actually, you should get
the root of the sum of the squares... because it is power you average,
not voltage), you might reduce that uncertainty to around 0.05dB... but
it is not a very practical manual method, if recording accuracy (ie
writing down the wrong number) doesn't get you, environmental drift will.

Owen

954. How to make a Stationmaster for hf ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 01:55:47 UTC
From: VK3XL <VK3XL.11953ea@radiobanter.com>
Message-ID: <VK3XL.11953ea@radiobanter.com>
Source record: 36871

Hi all, do you remember the old CD Stationmaster antenna? It was a end fed 1/2 wave. I would like to make one and I believe there are plans around to describe how its done, but so far I have not been able to locate them on the net. Does anyone know of a link to such a page, or even a magazine article etc. My work Library is quite good with regard to old ham magasines etc.

Any assistance is greatly appreciated.
thanks for looking
Mike
VK3XL

--
VK3XL

955. Re: OFDM, a key to rock solid BPL ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 04:49:01 UTC
From: gsm@mendelson.com
Message-ID: <slrnfd7a6c.s5t.gsm@cable.mendelson.com>
Source record: 36872

John Smith wrote:

> I suppose a whole new communication/distribution system, relays, inline
> amps, etc., along with a whole new infrastructure to maintain and
> support the mess ... speaking about the USA--of course.

The problem with that is in the U.S. the concept that the telephone network is a national resource and should be protected went out with the 1980's.

Competition, low prices and choice are considered far more important than quality, consistency, and reliability.

Considering that several long distance networks have been built in the U.S., one more would not hurt. :-)

> Frankly, the telcos, supposedly, have hardened/semi-hardened system to
> survive some level of EMP attack, and a complete communications system
> already in effect, maintaining lines is already done, etc., etc. ... it
> would be cheaper to just bring it out of the stone age and upgrade it to
> a user friendly level.

That's up to you. I'm sure every telco has a plan for becoming a modern high performance communications provider including voice, data, video, etc at very competitive rates. I'm also sure these plans only come off of the shelf to be dusted off and updated because no one wants to see the status quo changed.

Companies like Vonage, Packet8 and the now defunct SunRocket all came into existance because VoIP was an end run around the regulations that kept telcos charging high rates.

> But hey, a whole other system would be great, if you don't mind the
> extravagant cost of such ... I am of the opinion that the internet
> should be like the public water system--available to everyone at a cost
> which even the impoverished can afford--easily.

The problem with that is the cost of sending data. Since the IP part of the network uses packets of varying size, the latency and throughput depends upon how you schedule packets.

In a free for all world, small packets wait in line with big ones, which means all of those BitTorrents kill things like VoIP, on demand video, etc.

In a use the line the most efficently world, small packets get queued and sent in a batch after all the big ones are gone.

In a "we want low latency" (fast interactive services) world, small packets always go to the head of the line and large packets are stuffed in when there is room for them.

"You pays your money and you takes your choice." It's just that people expect to pay very little money and still get their choice.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

956. Re: How to make a Stationmaster for hf ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 05:35:58 UTC
From: dplatt@radagast.org
Message-ID: <uqocq4-3ni.ln1@radagast.org>
Source record: 36873

In article <VK3XL.11953ea@radiobanter.com>,
VK3XL <VK3XL.11953ea@radiobanter.com> wrote:

>Hi all, do you remember the old CD Stationmaster antenna? It was a end
>fed 1/2 wave. I would like to make one and I believe there are plans
>around to describe how its done, but so far I have not been able to
>locate them on the net. Does anyone know of a link to such a page, or
>even a magazine article etc. My work Library is quite good with regard
>to old ham magasines etc.

The Stationmaster I'm familiar with is an end-fed collinear for VHF...
doesn't sound quite like what you're speaking of.

End-fed halfwave antennas for HF seem fairly simple to make, but also
seem to have a reputation for being a bit tricky to get working well.
The usual approach to matching is to use a tuned tank circuit, feeding
the tank either inductively or at a tap point partway up the coil.

http://www.aa5tb.com/efha.html shows one approach... this one uses an
inductive link to feed the tank.

The page at http://www.smeter.net/feeding/tunehalf.php has a copy of
an article by Reg Edwards G4FGQ (SK) which shows the "tapped coil"
approach, and has a link to a copy of Reg's program to do the
necessary calculations.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

957. Re: OFDM, a key to rock solid BPL ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 06:24:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb0f3d$bp7$1@news.albasani.net>
Source record: 36874

Geoffrey S. Mendelson wrote:

> ...
> Geoff.

Your arguments sound very "standard" to me. However, in the real world, if reality is stripped bare of all lies and manipulations of power and money, it would look like the plan to bring free wifi to my city:

Companies are available immediately. The cost? Ads on pages. Yet, instead of my city negotiating how many ads and working out an agreement to where the ads would always be small, acceptable, and even into future times--the city is, instead, causing a bidding war between these companies which will cause them to have to inundate me with ads to be able to PAY THE CITY (raises, retirement, benefits, cars, gas, parking, and other perks, etc. for the b*st*rds) for PROVIDING "FREE" WIFI!

I am getting screwed. Every citizen in my city, IMHO, is getting screwed!

Some things just look simple to me ... this stands as a model to how things are done today--very badly, and internet availability is only a larger model of the one I just presented.

Indeed, I doubt many which are getting screwed even feel the "lovin'" the "powers which be" are giving 'em :-(

Regards,
JS

958. OWA yagi tapering dependency...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 07:25:43 UTC
From: Kari B <kba@nic.fi>
Message-ID: <M1QAi.214369$Qv2.86985@reader1.news.saunalahti.fi>
Source record: 36875

Hi

Original OWA 14MHz yagi element diameters and element positions make
good results on simulator.
Now I have plan to use tapering from older elements already available,
but this seems to make too much offset
compared to original OWA in simulator. (The element tapering would be
in three sections, 1st: diam. 1" , length 72", 2nd: diam. 0.875",
length 66" and the tip diam 0.5" instead of four sections used in the
original)

What could be reliable optimizing simulator (free ware) to fine tune
the element lengths and positions ?
Or is it even possible to get equal F/B and impedance matching as the
original dimensions show ?

br Kari B

959. Re: How to make a Stationmaster for hf ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 07:32:13 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns999AB25F7B3D9nonenowhere@61.9.191.5>
Source record: 36876

VK3XL <VK3XL.11953ea@radiobanter.com> wrote in
news:VK3XL.11953ea@radiobanter.com:

>
> Hi all, do you remember the old CD Stationmaster antenna? It was a end
> fed 1/2 wave. I would like to make one and I believe there are plans
> around to describe how its done, but so far I have not been able to
> locate them on the net. Does anyone know of a link to such a page, or
> even a magazine article etc. My work Library is quite good with regard
> to old ham magasines etc.
>
> Any assistance is greatly appreciated.
> thanks for looking
> Mike
> VK3XL

Mike,

You are more likely to get an answer by asking the question in an Australian context... but then a.r.a.m is a pretty uncivil place.

Next you could try Google, and it would turn up an article on Ron Bertrand's RadioElectronicsSchool:
http://www.radioelectronicschool.net/files/downloads/Stationmaster-3.pdf
.

Is it a good antenna? Well it seems to depend on the feed line as the 'other half' of the vertical dipole, so you should be assured of high current on the outer of the coax.

There may be other articles.

I note that quite a few of our new six hour hams with their shack on their belt use their Stationmaster unmodified with an ATU at the transceiver... and it 'works real good, SWR is 1:1'. Still, that is the downside of looking at the world through a SWR meter.

Owen

960. Re: OFDM, a key to rock solid BPL ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 08:09:02 UTC
From: gsm@mendelson.com
Message-ID: <slrnfd7ls5.v35.gsm@cable.mendelson.com>
Source record: 36877

John Smith wrote:
> Your arguments sound very "standard" to me. However, in the real world,
> if reality is stripped bare of all lies and manipulations of power and
> money, it would look like the plan to bring free wifi to my city:

Been there, done that. Had a company in formation, business plan
written and an angel investor lined up. Start small (a few streets,
the food court at the mall, etc). Some value added services for money, a
brand name picked, and some interesting technology for better location
than GPS.

We even had some interesting technology for providing ads, that we
were going to patent. Although the company never happend, other people
invented it again, but never bothered to patent it, so if we ever
get going again, we can use it. :-)

Then the city of Jerusalem announced that Intel was paying to "wire"
the city with free WiFi and our investor disapeared. It's now 2.5 years later
and we have a tiny, badly run network because the city council refused to
fund it, Intel's free hardware did not cover much (we have a very low radiated
power limit here).

Lots of restaurants now have free WiFi for their customers, because people
would ask the security guard at the door if they had free WiFi and when
they said no, walk on.

Besides funding BPL, didn't Google make a claim to do it and never
deliver? How many places had networks in planing which were abanonded
when they heard who the competition was supposed to be?

> I am getting screwed. Every citizen in my city, IMHO, is getting screwed!

Happens everywhere. Same thing happened in Philly with cable TV. They spent
10 years arguing about the critera, and forced the bidders to sell basic
cable for $2-$3 a month. In the end 3 of 4 sections of the city went to
Comcast, with a minority owned company getting the 4th. The day after
the contract was signed, they sold out Comcast at an enourmous profit.

Before the first wire was laid, the prices went up. The FCC ruled that a
local government could not regulate the price of cable services.
Needles to say, what was supposed to be $2 was closer to $20.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838

Visit my 'blog at http://geoffstechno.livejournal.com/

961. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 10:10:48 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1m8x7w55qv.fsf@persaunet.uninett.no>
Source record: 36878

John Smith <assemblywizard@gmail.com> writes:

> It seems to me, many here have suggested there are "tons" of active
> hams out there; some have even went so far as to claim the bands are
> "crowded."

How crowded?

CQ WW DX contest 2005 received 4430 logs for SSB, 4100 for CW. We all
agree that these events increase activity on the HF bands many
fold. How many of these are actually transmitting at any given time?
1000? (A few may be transmitting and listening at the same time, but
there are many more who aren't active for the entire permitted period.)

So how many simultaneous transmissions are there on the HF bands when
there isn't a contest going on? Low hundreds seems more likely.

73
Jon (LA4RT)

962. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 13:50:34 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <gp98d3156cd1lvnq545rv6b16q66dkktc0@4ax.com>
Source record: 36879

On Tue, 28 Aug 2007 12:10:48 +0200, Jon Kï¿½re Hellan <dev@null.com>
wrote:

>John Smith <assemblywizard@gmail.com> writes:
>
>> It seems to me, many here have suggested there are "tons" of active
>> hams out there; some have even went so far as to claim the bands are
>> "crowded."
>
>How crowded?
>
>CQ WW DX contest 2005 received 4430 logs for SSB, 4100 for CW. We all
>agree that these events increase activity on the HF bands many
>fold. How many of these are actually transmitting at any given time?
>1000? (A few may be transmitting and listening at the same time, but
>there are many more who aren't active for the entire permitted period.)
>
>So how many simultaneous transmissions are there on the HF bands when
>there isn't a contest going on? Low hundreds seems more likely.
>
>73
>Jon (LA4RT)

When I use my antenna analyzer, I'm normally twisting the frequency
control back and forth trying to find a resonant point, so it's not as
if my few milliwatts are going to be on any frequency for more than a
milli-second, much less rise above the static crashes...

bob
k5qwg

963. Re: OWA yagi tapering dependency...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 14:01:56 UTC
From: tclay@qmc.ph.msstate.edu
Message-ID: <86k5rfhi5n.fsf@qmc.ph.msstate.edu>
Source record: 36880

I built some 15m and 10m owa's a few years ago and used slightly different tapering. What I did was to first find the resonant frequency of each element as designed, then match the resonant frequency of the element with the new taper by adjusting the tip length. The overall design came out very close to the original specs, so I didn't worry about further optimization.

I used K7NV's yagi design (Yagistress) and EZNEC, but you could probably use a variety of tools to do the same.

Tor
N4OGW

964. 70cm and 2mtr Oscar Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 14:20:09 UTC
From: Howard Kowall <hkowall@shaw.ca>
Message-ID: <taWAi.100380$fJ5.87256@pd7urf1no>
Source record: 36881

Well here it goes.
I have the above antennas made by Hygain 1 of 70-30 Sat and 1 of 216 Sat
The problem I have is that the physical footprint of both theses antennas
are to long for where I want to put them.I can make the boom shorter by
removing a section of the boom from the directors end,what I mean by
removing is to undo the the coupling on the boom and this would save me
about 5 feet of boom length.What I was wondering is what ramification this
will present.I realize I will loose some gain,but what about all the other
electrical characteristic will this effect (bandwidth,inpedence,swr etc.)
thanx
howard

965. Re: How to make a Stationmaster for hf ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 15:02:31 UTC
From: Wimpie <wimtel@tetech.nl>
Message-ID: <1188313351.276557.292100@22g2000hsm.googlegroups.com>
Source record: 36882

On 28 ago, 03:55, VK3XL <VK3XL.1195...@radiobanter.com> wrote:
> Hi all, do you remember the old CD Stationmaster antenna? It was a end
> fed 1/2 wave. I would like to make one and I believe there are plans
> around to describe how its done, but so far I have not been able to
> locate them on the net. Does anyone know of a link to such a page, or
> even a magazine article etc. My work Library is quite good with regard
> to old ham magasines etc.
>
> Any assistance is greatly appreciated.
> thanks for looking
> Mike
> VK3XL
>
> --
> VK3XL

High Mike,

The stationmaster is a HW end-fed antenna with LC matching section (L between center of coax and radiator, C is capacitance between radiator and radiator support construction).

You can make such an antenna for other frequencies (I did it recently for VHF air band). The advantage of the HW over de 1/4W antenna is the feed point impedance. Depending on the length/diameter ratio of the radiator, the end-fed impedance varies between about 300 Ohm and 3 kOhms. When the radiator is horizontally, close over a reasonable conducting ground, end-fed impedance may rise up to 10 kOhms. This will result in High Voltage at the feed point as well.

The ground current (or coax screen current when no ground construction is present), is about a factor sqrt(Zend-fed/40) lower with respect to a 1/4W antenna (can be a factor 8). As long as the impedance that is used as ground (or counterpoise) is far below the end-fed impedance, the antenna works well. Gain and radiation pattern will be same as for HW dipole.

There are some things that can go wrong. Most people tune by changing the length of the antenna. That may result in the radiator to work off-resonance, reducing the end-fed impedance and increasing the feed current for the counterpoise. So in my opinion best thing is first tune the antenna (without matching network and low power) to minimum counterpoise current (measure with current probe) and then do the matching network.

For the LC matching network, the C can be the capacitance between the radiator and the metallic structure that supports the antenna. I prefer the LC network above the LC tank circuit because of the higher Q-factor of the tank circuit. This reduces the useful bandwidth of the antenna significantly. As the matching is under the radiator, tuning is not that easy.

When you need further information, don't hesitate to repost.

Best regards,

Wim
PA3DJS
www.tetech.nl

966. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 15:54:10 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fb1gf2$169i$1@f04n12.cac.psu.edu>
Source record: 36734

Jon Kï¿½re Hellan wrote:
> John Smith <assemblywizard@gmail.com> writes:
>
>> It seems to me, many here have suggested there are "tons" of active
>> hams out there; some have even went so far as to claim the bands are
>> "crowded."
>
> How crowded?
>
> CQ WW DX contest 2005 received 4430 logs for SSB, 4100 for CW. We all
> agree that these events increase activity on the HF bands many
> fold. How many of these are actually transmitting at any given time?
> 1000? (A few may be transmitting and listening at the same time, but
> there are many more who aren't active for the entire permitted period.)
>
> So how many simultaneous transmissions are there on the HF bands when
> there isn't a contest going on? Low hundreds seems more likely.

When I scan the bands, I hear quite a bit of activity. Those who have
problems hearing other folks should first check their antenna system.

- 73 de Mike KB3EIA -

967. Re: OFDM, a key to rock solid BPL ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 16:06:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb1h6aaip1@news.albasani.net>
Source record: 36735

Jim Higgins wrote:

> ...
> You do a fine job of chewing my ass, but you completey fail to explain
> how BPL will turn the current economics upside down.

Jim:

To the above:

Frankly, you are just not important enough to "chew your A55." Now
don't get offended--that is just NOT what I am about ...

> You might want to compare the bandwidth of optical cable vs BPL and
> how quickly the Nyquist limit is reached on each before running off so
> at the mouth about bandwidth.

To the above:

This: "The resulting BPL (Broadband Over Powerline) should be a lot
faster than DSL, with theoretical transmission rates hitting between
256k/s and 2.7 MB/s."

From here:

http://gizmodo.com/gadgets/it.s-electric/directv-offering-powerline-broadbandvoip-289638.p
hp

I may have points to argue, I may be rather "energetic" about arguing
these points. I may not choose my words to "please" others; but, pick
on 'ya by design? Naaaa ...

Oh. And, by the way, BPL is only in its' infancy--count on improvements
on a fast and furious basis.

And, I think here in the USA our phone lines should ALL be optical.
Video Phones in every home, etc. But then, I don't run the USA!
Installing a optical cable and maintaining it in my home would be
wonderful! My TV, stereo, phone, computer, etc. would love it! Well,
I'd have to throw out the ancient phone and get an optical digital
one--but, I'd manage ...

Regards,
JS

968. Diamond X-510N or UVS-300

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 17:21:46 UTC
From: "Krzysztof Łęgowski"
Message-ID: <fb1lq3fub1@mx1.internetia.pl>
Source record: 36736

Have someone a pictures of the X-510N or UVS-300 - dualband 2m/70cm antenna from inside? Someone folded it bad and now I dunno which part should be where, and maybe turned over 180 degrees... Thank you.

969. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 18:05:03 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <46D463CF.1080309@jpl.nasa.gov>
Source record: 36737

Dave Oldridge wrote:
> Owen Duffy <none@no.where> wrote in news:Xns999955EE72868nonenowhere@
> 61.9.191.5:
>
>
>>Dave Oldridge <doldridg@leavethisoutshaw.ca> wrote in
>>news:Xns999897D777889doldridgsprintca@64.59.135.159:
>>
>>
>>>Near as I could measure it, the NF of the receiver after my mod was
>>>1.2db. I had to resort to boiling and freezing water and a tiny dummy
>>>load to measure it at all.
>>
<snip>

>
> This
>
>>still demands high resolution measurement of noise power.
>
>
> Yes, anything less than 4 digits is just about useless.

That would be necessary but not sufficient.

I suspect that other aspects of the measurement introduce greater uncertainty than the voltmeter. For instance, do you know the reflection coefficient of the load to 4 digits? (that would be knowing Z to about 0.1 ohm, at the RF frequency of interest), and is it stable with temperature to that level?

For instance, a high quality load from Maury Microwave (a 2610F) is specified to have a VSWR of 1.005 from DC-1GHz, which is a reflection coefficient of 0.0025. But that's only at 25C.

An Agilent metrology grade cal kit with N connectors specifies rho<0.00398 for the lowband loads, but only within 1 degree of the specified temperature.
See, for example:
http://cp.literature.agilent.com/litweb/pdf/85054-90049.pdf

A good thinfilm resistor might have a tempco of 5 ppm, with metal film being around 50 ppm, and thick film more in the 200 ppm area. For a 100 degree change, that's a 500 ppm (for the thin film) or a reflection coefficient change of 0.00025. Clearly one doesn't want to use any old resistor for the calibration load here.

Measuring RF power to an accuracy of 1% is challenging. Your system is measuring a change in noise power of 100K out of 300K, roughly, so you've got a 30% change in noise power into the system.

The Y-factor method essentially plots two points (one at 273K another at 373K, if you're using ice and boiling water), and then calculates the intercept at 0K. Since zeroK is about 3 times farther away than the measurement's width, errors in the measurement are roughly tripled at the intercept, and then doubled because you're using two measurements, so an error of 1% in the power measurement leads to about 5% error in the NF (if you're around 100K) (and this also applies if you have consistent errors.. say both power measurements are 1% high, the NF will come back as 105K instead of 100K).

A 5% measurement uncertainty for power (0.2dB) gets you about 25-30% uncertainty in NF.

The best way to improve the accuracy is to push the low temperature lower (e.g. with dry ice (195K) or LN2 (77K)), but that, of course, aggravates the change in reflection coefficient of your load with temperature.

970. Re: OFDM, a key to rock solid BPL ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 21:19:41 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb23hs$965$1@registered.motzarella.org>
Source record: 36738

Geoffrey S. Mendelson wrote:

> ...
> Geoff.

Geoff:

And therein lies the REAL problem(s.) :-(

However, if they can split us into races, creeds, religions, income
brackets, etc. (heck, even maybe groups whose tastes in clothes differ!)
they get power-wealth-perks-etc.--you know what we get (_|_) :-(

Regards,
JS

971. Re: How to make a Stationmaster for hf ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-28 22:36:10 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns999B577D3ECE9nonenowhere@61.9.191.5>
Source record: 36739

Wimpie <wimtel@tetech.nl> wrote in news:1188313351.276557.292100@
22g2000hsm.googlegroups.com:

clipped... a nice description of an end fed vertical half wave with
matching network.

Wimpie, I think the OP had using the stationmaster radiator element
unchanged on lower HF bands.

You could view this as a 5.5m long radiator sitting on say, a 4m metallic
support mast, fed at the junction of the two. Typically the configuration
involves no radials at the base of the 5.5m radiator, and an shabby
connection to earth at the base of the supporting mast.

If at 80m you were to assume the earth resistance was as good as 30 ohms,
the earth loss alone would account for 60% of the power reaching the
feedpoint when the antenna is modelled without provision for current on
the outer of the feedline.

So, the StationMaster as described in the article is typically a ground
mounted ~1/8wl vertical with an inadequate ground system, elevated feed,
high sensitivity to noise, highly susceptible to RF in the shack unless
the feedline is decoupled adequately.

It is a little better on 40m, but all of the issues remain.

A lot of the guys wanting to do such a thing are our new six hour hams,
and they would be principally interested in 80 and 40m.

Owen

972. Re: Is an Antenna Analyzer an FCC violation?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-29 00:11:13 UTC
From: "X-rated Vermonter"
Message-ID: <2be9d3tgvt9gbtp1h7jsvstmn673rkrh1b@4ax.com>
Source record: 36740

On Wed, 22 Aug 2007 21:37:06 GMT, "Thomas Magma"
<somewhere@overtherainbow.com> wrote:

>Hi,
>
>I'm trying to determine if using an antenna analyzer is technically a
>violation of the telecommunications Code of Federal Regulations. Typical
>antenna analyzers inject a incident CW or sweeping CW to the antenna and
>measure its return loss (reflection). Very few frequency bands have a CW or
>sweeping CW as their allowed modulation type. The way I see it is that by
>using an antenna analyzer you are intentionally radiating an improper
>modulation type that was allocated for the band and therefore you are in
>violation of the Code of Federal Regulations.
>
>Anyone have any thoughts on this topic?
>
>Thomas Magma
++++++++
Tom, I think Riley Hollingsworth has higher priority issues to worry
about.
>

973. Re: How to make a Stationmaster for hf ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-29 00:28:18 UTC
From: VK3XL <VK3XL.11aa568@radiobanter.com>
Message-ID: <VK3XL.11aa568@radiobanter.com>
Source record: 36742

Thanks all for your replies. They have given me enough info to embark on
the intended project. Again thanks for your help.
Mike
VK3XL

--
VK3XL

974. test

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-29 01:19:38 UTC
From: Jim-NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <BT3Bi.7196$924.2428@newssvr23.news.prodigy.net>
Source record: 36741

```
test
```

975. Re: How to make a Stationmaster for hf ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-29 08:02:00 UTC
From: Wimpie <wimtel@tetech.nl>
Message-ID: <1188374520.280142.58220@57g2000hsv.googlegroups.com>
Source record: 36743

On 29 ago, 00:36, Owen Duffy <n...@no.where> wrote:
> Wimpie <wim...@tetech.nl> wrote in news:1188313351.276557.292100@
> 22g2000hsm.googlegroups.com:
>
> clipped... a nice description of an end fed vertical half wave with
> matching network.
>
> Wimpie, I think the OP had using the stationmaster radiator element
> unchanged on lower HF bands.
>
> You could view this as a 5.5m long radiator sitting on say, a 4m metallic
> support mast, fed at the junction of the two. Typically the configuration
> involves no radials at the base of the 5.5m radiator, and an shabby
> connection to earth at the base of the supporting mast.
>
> If at 80m you were to assume the earth resistance was as good as 30 ohms,
> the earth loss alone would account for 60% of the power reaching the
> feedpoint when the antenna is modelled without provision for current on
> the outer of the feedline.
>
> So, the StationMaster as described in the article is typically a ground
> mounted ~1/8wl vertical with an inadequate ground system, elevated feed,
> high sensitivity to noise, highly susceptible to RF in the shack unless
> the feedline is decoupled adequately.
>
> It is a little better on 40m, but all of the issues remain.
>
> A lot of the guys wanting to do such a thing are our new six hour hams,
> and they would be principally interested in 80 and 40m.
>
> Owen

Hello Owen,

I was expecting that he would scale the design to another frequency to
assure half wave operation at the design frequency.

If one is really planning to do what you described (using the 5.5m
radiator from 80m..40m and upwards), it is a far from optimal choice
for transmitting. At 80m, the radiation resistance is still less then
2 Ohms, at 40m about 7 Ohms, so assuming 30 Ohm ground resistance will
result in a poor efficiency (about <6% at 80m and <19% at 40m). Off
course when one makes a large ground network, efficiency will be
better.

Best regards,

Wim
PA3DJS
www.tetech.nl

976. Re: OWA yagi tapering dependency...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-29 16:36:53 UTC
From: Kba <kba@nic.fi>
Message-ID: <hehBi.215155$Av7.202042@reader1.news.saunalahti.fi>
Source record: 36744

tclay@qmc.ph.msstate.edu wrote:
> I built some 15m and 10m owa's a few years ago and used slightly different
> tapering. What I did was to first find the resonant frequency of each
> element as designed, then match the resonant frequency of the element with
> the new taper by adjusting the tip length. The overall design came out very
> close to the original specs, so I didn't worry about further optimization.
>
> I used K7NV's yagi design (Yagistress) and EZNEC, but you could probably
> use a variety of tools to do the same.
>
> Tor
> N4OGW

Hi Tor, thanks for the help
...it seems to be proven method as I did quick check and
F/B shifted very close to the original and impedance curve was quite ok.
This was very quick as I already had both sw's.
Actual impedance measurements must wait the monster is up probably next summer...

thanks Kari B
Oh6io

977. Re: OWA yagi tapering dependency...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-29 17:14:33 UTC
From: tclay@qmc.ph.msstate.edu
Message-ID: <864piimfeu.fsf@qmc.ph.msstate.edu>
Source record: 36745

>Hi Tor, thanks for the help
>...it seems to be proven method as I did quick check and
>F/B shifted very close to the original and impedance curve was quite ok.
>This was very quick as I already had both sw's.
>Actual impedance measurements must wait the monster is up probably next summer...

I think you will find they are very easy to build. The only adjustment
that might be needed is the tip lengths on the driven length, which might
vary somewhat depending on the lead lengths on your balun. But I found on
mine (I built two 6 el/21 Mhz and one 6 el/28 Mhz) that I didn't need to
adjust anything in the actual antenna. No adjusting matching networks
since they are 50 ohm Z anyway.

I used insulated element brackets, if you use metal plates you might want
account for that.

The one thing I don't particularly like about the designs I used is that
they are hard to side-mount (with a rotator) on a tower, since one element
is very close to the center of the boom. But they seem to perform quite well.

Tor
N4OGW

978. Enter now stronger surprise 2007

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-29 18:04:54 UTC
From: jeena <www.co-ce.com@hotmail.com>
Message-ID: <1188410694.677777.14190@r34g2000hsd.googlegroups.com>
Source record: 36746

Enter now stronger surprise 2007
http://co-ce.com/vb/showthread.php?t=117

979. Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-29 19:53:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb4is3bln1@registered.motzarella.org>
Source record: 36747

Ok. You might ask me, "Why do you laugh at people discussing antennas emitting photons?

And, I would answer:

Photon emissions from an antenna element(s) seems difficult, at best, to visualize (no pun intended.)

Consider a 1/2 inch dia. single element antenna (monopole?) If the thing is emitting photons, one would think the photons are being emitted equally around the elements circumference.

Well, now flatten that 1/2 dia rod into a very thin ribbon--however, the ribbon still has the same area of cross section, and equal to the cross section of the round rod. If this conductor is emitting photons, one would expect them, now, to be off the two flat sides of the element and relative few off the sides--indeed, one would now expect this element to be becoming directional in two favored directions--off the flat sides ... to date, I have NOT been able to measure an acceptable difference to reinforce the "illumination properties" of the element.

The photon/wave properties of rf still remains a mystery ... and proof hard to come by.

Regards,
JS

980. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-29 21:29:29 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <o2obd39ql1rogc2bsfrift448mb3i0is91@4ax.com>
Source record: 36748

On Wed, 29 Aug 2007 12:53:25 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Ok. You might ask me, "Why do you laugh at people discussing antennas
>emitting photons?

(You don't close quotes is one larf. Why people laugh is a condition
of creationist-like explanations that attend the topic.)

>And, I would answer:
>
>Photon emissions from an antenna element(s) seems difficult, at best, to
>visualize (no pun intended.)

The explanation is simple. Because of the pun (intended or otherwise)
too many expect that the experience of "seeing" is sufficient to
understanding "visualization." Nothing could be further from the
truth. The quote that follows provides sufficient evidence to this:

>Consider a 1/2 inch dia. single element antenna (monopole?) If the
>thing is emitting photons, one would think the photons are being emitted
>equally around the elements circumference.

This confuses thinking with visualization now. Unfortunately it
proceeds from a false premise. It is also a false premise if we
simply ignore "photon" and discuss this in the rather more prosaic
term of "fields."

All points of all surfaces are active emitters. Your "perception"
(visualization) is a far field response of the total contributions of
all sources and their phases. This perception creates an "illusion."
Illusions are fun and interesting, but they bear only on cognitive
issues, not Physics.

73's
Richard Clark, KB7QHC

981. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-29 21:57:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb4q40$7qu$1@news.albasani.net>
Source record: 36749

Richard Clark wrote:

> ...
> 73's
> Richard Clark, KB7QHC

Unless there is a clear, defined and model-able example of why a "rf photon" would behave different than a "light photon"--I expect both to obey current laws/actions/expected-behaviors.

However, everyone enjoys a good fairytale, now and then.

There it is ==>> "

The missing double quote! :-)

Regards,
JS

982. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-29 23:11:24 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <tuKdnfPbN7KEYEjbnZ2dnUVZ8taknZ2d@bt.com>
Source record: 36750

"John Smith" <assemblywizard@gmail.com> wrote in message
news:fb4is3bln1@registered.motzarella.org...
> Ok. You might ask me, "Why do you laugh at people discussing antennas
> emitting photons?
>
> And, I would answer:
>
> Photon emissions from an antenna element(s) seems difficult, at best, to
> visualize (no pun intended.)
>
> Consider a 1/2 inch dia. single element antenna (monopole?) If the thing
> is emitting photons, one would think the photons are being emitted equally
> around the elements circumference.
>
> Well, now flatten that 1/2 dia rod into a very thin ribbon--however, the
> ribbon still has the same area of cross section, and equal to the cross
> section of the round rod. If this conductor is emitting photons, one
> would expect them, now, to be off the two flat sides of the element and
> relative few off the sides--indeed, one would now expect this element to
> be becoming directional in two favored directions--off the flat sides ...
> to date, I have NOT been able to measure an acceptable difference to
> reinforce the "illumination properties" of the element.
>
> The photon/wave properties of rf still remains a mystery ... and proof
> hard to come by.
>
> Regards,
> JS

John

Imagine your ribbon antena flattened to the thickness of a razor blade.
Instead of using RF, heat the antenna with a blow torch until it becomes
white hot.

It is only when looking at the exact edge of the antenna that any
appreciable drop in light out put will be noticed. At all broadside angles
an appreciable amount of light would be seen. The same effects can be
expected to occur at RF but the majority of amateur test equipment would not
have the resolution to measure the dip with the antenna edge on. The width
of the receiving antenna and diffraction effects would tend to hide this in
the far field, and alignment, reflection effects and manufacturing
tolerances in the near field.

An example from nature can be seen when looking at the planet Saturn. The rings are clearly visible through even a small telescope except for a couple of weeks when they are aligned exactly edge on to the earth. Even at very oblique angles, enough light is reflected to make them quite visible.

Mike G0ULI

983. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-29 23:27:13 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1188430033.816731.93350@k79g2000hse.googlegroups.com>
Source record: 36751

On 29 Aug, 14:57, John Smith <assemblywiz...@gmail.com> wrote:
> Richard Clark wrote:
>
> > ...
>
> > 73's
> > Richard Clark, KB7QHC
>
> Unless there is a clear, defined and model-able example of why a "rf
> photon" would behave different than a "light photon"--I expect both to
> obey current laws/actions/expected-behaviors.
>
> However, everyone enjoys a good fairytale, now and then.
>
> There it is ==>> "
>
> The missing double quote! :-)
>
> Regards,
> JS

Intersting debating point as to whether it is a fairy tail!
May I point out that a H bomb explosion creats via the velocity of the
explosion
radiation with out the use of a resonant element! In the old days we
used a spark gap to create
radiation again without a resonant element! Tho scientists would say
that it is a consequence
of time varient current and thus settle on the current change of
velocity ie accelleration, They could have easily stated that
radiation is pulsed form after all current does go thru zero and
Newton himself phrased it as "packets"
of radiation in his day. But keeping to the same rules of the Masters
of what creats radiation one could easily see from the explosion
theory that radiation is created by the exchange of energy between
capapaciters and inductance
each of which provides a explosion when shorted at the end of each
cycle which promotes the particulate theorem without conflict with the
Masters. I would remind you that "Gausses theorem" with respect to
equilibrium supports the particulate theorem which to the surprise of
many is supported by Maxwells equations. I read the reply that you got
but I could not determine his position if any or what points he was
trying to make...if any.
A point to ponder on, capacitance and inductance are both capable of

energy storage and shorting the terminals is time varient to eject particulates at a high velocity thus creatin two pulses per cycle and where in their absence scientists have only time varient current to hang their hats on for the wave theorem.
Regards
Art

984. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-29 23:29:32 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1188430172.476099.32430@57g2000hsv.googlegroups.com>
Source record: 36752

On Aug 29, 12:53 pm, John Smith <assemblywiz...@gmail.com> wrote:
> Ok. You might ask me, "Why do you laugh at people discussing antennas
> emitting photons?
>
> And, I would answer:
>
> Photon emissions from an antenna element(s) seems difficult, at best, to
> visualize (no pun intended.)
>
> Consider a 1/2 inch dia. single element antenna (monopole?) If the
> thing is emitting photons, one would think the photons are being emitted
> equally around the elements circumference.
>
> Well, now flatten that 1/2 dia rod into a very thin ribbon--however, the
> ribbon still has the same area of cross section, and equal to the cross
> section of the round rod. If this conductor is emitting photons, one
> would expect them, now, to be off the two flat sides of the element and
> relative few off the sides--indeed, one would now expect this element to
> be becoming directional in two favored directions--off the flat sides
> ... to date, I have NOT been able to measure an acceptable difference to
> reinforce the "illumination properties" of the element.
>
> The photon/wave properties of rf still remains a mystery ... and proof
> hard to come by.
>
> Regards,
> JS

You'd have just as much trouble understanding the behaviour of visible-
light photons, given your desire to view them, apparently, as you
would billiard balls or some other macro-size physical object. You
might enjoy reading how Feynmann described the behaviour in his
physics lectures at Cal Tech. It's something along the lines of,
"They behave differently than anything you have any experience with.
Much differently."

On the other hand, there's probably not much utility in discussing
photons of, say, a 14MHz signal, simply because the energy contained
in one quantum at that frequency is so small that you won't be able to
detect it: a little less than 10^-26 joules per photon. At one
photon per second, that's under 10^-26 watts, if you collect all the
energy. At 50 ohms, that's less than a picovolt. Noise in a 1Hz
bandwidth in a 50 ohm resistor at room temperature is about a
thousand times that much. -- Yes, the energy is quantized. But the
quanta are going to be _very_ difficult to distinguish.

Cheers,
Tom

985. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 00:29:10 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fb53lk$g9r$1@news.service.uci.edu>
Source record: 36758

John Smith wrote:
> Ok. You might ask me, "Why do you laugh at people discussing antennas
> emitting photons?
>
> And, I would answer:
>
> Photon emissions from an antenna element(s) seems difficult, at best, to
> visualize (no pun intended.)
>
> Consider a 1/2 inch dia. single element antenna (monopole?) If the
> thing is emitting photons, one would think the photons are being emitted
> equally around the elements circumference.
>
> Well, now flatten that 1/2 dia rod into a very thin ribbon--however, the
> ribbon still has the same area of cross section, and equal to the cross
> section of the round rod. If this conductor is emitting photons, one
> would expect them, now, to be off the two flat sides of the element and
> relative few off the sides--indeed, one would now expect this element to
> be becoming directional in two favored directions--off the flat sides
> ... to date, I have NOT been able to measure an acceptable difference to
> reinforce the "illumination properties" of the element.
>
> The photon/wave properties of rf still remains a mystery ... and proof
> hard to come by.
>
> Regards,
> JS

Get a copy of Richard Feynman's "QED". It's 4 of his lectures on the
subject.

jk

986. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 00:35:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb53d9$op9$1@news.albasani.net>
Source record: 36753

K7ITM wrote:

> ...
> On the other hand, there's probably not much utility in discussing
> photons of, say, a 14MHz signal, simply because the energy contained
> in one quantum at that frequency is so small that you won't be able to
> detect it: a little less than 10^-26 joules per photon. At one
> photon per second, that's under 10^-26 watts, if you collect all the
> energy. At 50 ohms, that's less than a picovolt. Noise in a 1Hz
> bandwidth in a 50 ohm resistor at room temperature is about a
> thousand times that much. -- Yes, the energy is quantized. But the
> quanta are going to be _very_ difficult to distinguish.
>
> Cheers,
> Tom
>

If there are, indeed, as many photons being emitted by the thin edge of the ribbon, as by the broad edges, what law/effect/affect is being demonstrated here?

Or. why are the photons "drawn" to the thin edge with such magnitude of force?

If this ribbon was white hot (even infrared) a meter would indicate more energy from the greatest surface area. Occams' razor is wrong, again?

I have never read of the phenomenon you seem to be suggesting here ...

Regards,
JS

987. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 00:38:14 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1188434294.750903.155630@50g2000hsm.googlegroups.com>
Source record: 36754

On Aug 29, 4:11 pm, "Mike Kaliski" <michael.kali...@tesco.net> wrote:
> "John Smith" <assemblywiz...@gmail.com> wrote in message
>
> news:fb4is3bln1@registered.motzarella.org...
>
>
>
> > Ok. You might ask me, "Why do you laugh at people discussing antennas
> > emitting photons?
>
> > And, I would answer:
>
> > Photon emissions from an antenna element(s) seems difficult, at best, to
> > visualize (no pun intended.)
>
> > Consider a 1/2 inch dia. single element antenna (monopole?) If the thing
> > is emitting photons, one would think the photons are being emitted equally
> > around the elements circumference.
>
> > Well, now flatten that 1/2 dia rod into a very thin ribbon--however, the
> > ribbon still has the same area of cross section, and equal to the cross
> > section of the round rod. If this conductor is emitting photons, one
> > would expect them, now, to be off the two flat sides of the element and
> > relative few off the sides--indeed, one would now expect this element to
> > be becoming directional in two favored directions--off the flat sides ...
> > to date, I have NOT been able to measure an acceptable difference to
> > reinforce the "illumination properties" of the element.
>
> > The photon/wave properties of rf still remains a mystery ... and proof
> > hard to come by.
>
> > Regards,
> > JS
>
> John
>
> Imagine your ribbon antena flattened to the thickness of a razor blade.
> Instead of using RF, heat the antenna with a blow torch until it becomes
> white hot.
>
> It is only when looking at the exact edge of the antenna that any
> appreciable drop in light out put will be noticed. At all broadside angles
> an appreciable amount of light would be seen. The same effects can be
> expected to occur at RF but the majority of amateur test equipment would not

> have the resolution to measure the dip with the antenna edge on. The width
> of the receiving antenna and diffraction effects would tend to hide this in
> the far field, and alignment, reflection effects and manufacturing
> tolerances in the near field.

Or perhaps more appropriately, with visible light being around 500 nanometers wavelength, imagine your antenna wire being about 0.01 nanometers thick and 1 nanometer wide (and 250 nanometers long, if you wish) ... Now does you intuition tell you anything useful about the angular distribution of emitted photons? I suppose not.

Cheers,
Tom

988. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 00:40:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb53lk$op9$2@news.albasani.net>
Source record: 36755

Mike Kaliski wrote:

> ...
> It is only when looking at the exact edge of the antenna that any
> appreciable drop in light out put will be noticed. At all broadside
> angles an appreciable amount of light would be seen. The same effects
> can be expected to occur at RF but the majority of amateur test
> equipment would not have the resolution to measure the dip with the
> antenna edge on. The width of the receiving antenna and diffraction
> effects would tend to hide this in the far field, and alignment,
> reflection effects and manufacturing tolerances in the near field.
> ...
> Mike G0ULI

The eye, like the ear, has defects, in the fact it is not linear.

However, if a ribbon the width and depth of a razor blade is white hot,
a light meter available and rotated around this ribbon--the least energy
would come from the side, the most from the flat. There would be
something of a linear graph in the 90 degree rotation between thinnest
to broadest ... please, don't attempt to kid a kidder.

Regards,
JS

989. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 00:48:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb5457$op9$3@news.albasani.net>
Source record: 36756

John Smith wrote:

> ...
> I have never read of the phenomenon you seem to be suggesting here ...
>
> Regards,
> JS

Actually, that is not quite true as stated. I should have said, "I have not read of that phenomenon occurring with photons. Electrons? Yes. Photons? No.

Regards,
JS

990. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 00:49:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb547p$op9$4@news.albasani.net>
Source record: 36757

John Smith wrote:

> ...
> Regards,
> JS

And, oh.

The missing double quotes, for Richards benefit ==>> " :-)

JS

991. Re: How to make a Stationmaster for hf ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 00:53:56 UTC
From: VK3XL <VK3XL.11bf6e5@radiobanter.com>
Message-ID: <VK3XL.11bf6e5@radiobanter.com>
Source record: 36777

Wimpie;590418 Wrote:
> On 29 ago, 00:36, Owen Duffy n...@no.where wrote:-
> Wimpie wim...@tetech.nl wrote in news:1188313351.276557.292100@
> 22g2000hsm.googlegroups.com:
>
> clipped... a nice description of an end fed vertical half wave with
> matching network.
>
> Wimpie, I think the OP had using the stationmaster radiator element
> unchanged on lower HF bands.
>
> You could view this as a 5.5m long radiator sitting on say, a 4m
> metallic
> support mast, fed at the junction of the two. Typically the
> configuration
> involves no radials at the base of the 5.5m radiator, and an shabby
> connection to earth at the base of the supporting mast.
>
> If at 80m you were to assume the earth resistance was as good as 30
> ohms,
> the earth loss alone would account for 60% of the power reaching the
> feedpoint when the antenna is modelled without provision for current
> on
> the outer of the feedline.
>
> So, the StationMaster as described in the article is typically a
> ground
> mounted ~1/8wl vertical with an inadequate ground system, elevated
> feed,
> high sensitivity to noise, highly susceptible to RF in the shack
> unless
> the feedline is decoupled adequately.
>
> It is a little better on 40m, but all of the issues remain.
>
> A lot of the guys wanting to do such a thing are our new six hour
> hams,
> and they would be principally interested in 80 and 40m.
>
> Owen-
>
> Hello Owen,
>
> I was expecting that he would scale the design to another frequency to

> assure half wave operation at the design frequency.
>
> If one is really planning to do what you described (using the 5.5m
> radiator from 80m..40m and upwards), it is a far from optimal choice
> for transmitting. At 80m, the radiation resistance is still less then
> 2 Ohms, at 40m about 7 Ohms, so assuming 30 Ohm ground resistance will
> result in a poor efficiency (about 6% at 80m and 19% at 40m). Off
> course when one makes a large ground network, efficiency will be
> better.
>
> Best regards,
>
> Wim
> PA3DJS
> www.tetech.nl

My intention is to use this antenna on the 10 meter FM section of the band. I have been given a 1/2 wave "Ringo" antenna that is missing the ring. I intend to convert it to the "stationmaster" type antenna as I think it will be easier to get the matching system right using a coil spaced from the bottom of the radiator than try to make a new matching ring etc. Thus if I could locate plans for the making of such an antenna it would save me a fair amount of time in the calculations and cut and try type of antenna building.

The info collected so far is at least a starting point for the conversion of this antenna.

Thanks to all who have given input, it is greatly appreciated.

Mike
VK3XL

--
VK3XL

992. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 01:04:08 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns999BB7D2494CHuckleberryREMOVEbig@198.186.192.196>
Source record: 36759

How is it that you guys are comparing the photon, a sub-atomic particle without mass, to electromagnetic radiation/waves? I don't see a basis for comparison.....

Ed K7AAT

993. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 01:13:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <et5cd35d4v78bon3s4e5hh7eh8s6m6nofe@4ax.com>
Source record: 36760

On Wed, 29 Aug 2007 17:35:40 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>If there are, indeed, as many photons being emitted by the thin edge of
>the ribbon, as by the broad edges, what law/effect/affect is being
>demonstrated here?

Try the combination of all amplitudes and phases at a distance (pretty
usual stuff already covered).

>Or. why are the photons "drawn" to the thin edge with such magnitude of
>force?

What force? Give us a number, Tom did.

>If this ribbon was white hot (even infrared) a meter would indicate more
>energy from the greatest surface area. Occams' razor is wrong, again?
>
>I have never read of the phenomenon you seem to be suggesting here ...

Consult Planck where it (predating the term photon) is summed up in
two variables and one constant.

73's
Richard Clark, KB7QHC

994. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 01:16:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb55qebst1@news.albasani.net>
Source record: 36761

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

This: "Firms like Rubitec and NetTel Africa at the event unveiled cost effective technology solutions that will help operators power their cell cites, tackle their power challenge and ensure continuous quality service. NetTel unveiled a Broadband carrier technology called BPL that couples or injects broadband signals at frequency range of 1.705-80MHz by conduction over Powerlines. Broadband enables the simultaneous transmission of data, voice and video on the same medium at a speed faster than the primary rate ISDN at 1.5 (T1) or 2 (E1) Mbit/s, while Powerline is the medium used for transmission and distribution of electricity to the utility consumers."

From here: http://www.thisdayonline.com/nview.php?id=87730

Regards,
JS

995. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 01:21:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5f6cd3hpvoaet73kqa5sliindsh24ncqc3@4ax.com>
Source record: 36763

On 30 Aug 2007 01:04:08 GMT, Ed G <Huckleberry_REMOVE_@bigvalley.net>
wrote:

> How is it that you guys are comparing the photon, a sub-atomic particle
>without mass, to electromagnetic radiation/waves? I don't see a basis
>for comparison.....

Hi Ed,

Mass as a basis of comparison implied:
How much do your electromagnetic radiation/waves weigh?
How thick is sunlight on your arm while driving?

If they don't compare, then these questions should reveal differences
when light is substituted for waves (and versa-visa).

73's
Richard Clark, KB7QHC

996. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 01:22:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb5653cqo1@news.albasani.net>
Source record: 36762

Richard Clark wrote:

> ...
> Try the combination of all amplitudes and phases at a distance (pretty
> usual stuff already covered).
> ...
> 73's
> Richard Clark, KB7QHC

For you Richard, just remember to stand the broadside of a stove on cold winter days--wouldn't want 'ya to catch yer death of cold! :-)

Regards,
JS

997. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 01:23:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <d07cd3l4f9sp086hoecaa23usmlbuarhep@4ax.com>
Source record: 36764

On Wed, 29 Aug 2007 18:22:30 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>For you Richard, just remember to stand the broadside of a stove on cold
>winter days--wouldn't want 'ya to catch yer death of cold! :-)

That has nothing to do with Photons.

73's
Richard Clark, KB7QHC

998. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 01:35:10 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb56sscqo2@news.albasani.net>
Source record: 36765

Richard Clark wrote:

> ...
> That has nothing to do with Photons.
>
> 73's
> Richard Clark, KB7QHC

Your post has nothing to do with my wifes' earlier email!

Well, other than they are both text, both sent over the internet, both
are smtp protocols, both are typed, both required the use of a computer,
both were/are in english--well, 'ya know what I mean ... :-)

Regards,
JS

999. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 01:46:09 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bq7cd3lukqjk6acpv8qc5t99qafbvf5mnc@4ax.com>
Source record: 36766

On Wed, 29 Aug 2007 18:35:10 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Well, other than they are both text, both sent over the internet, both
>are smtp protocols

Even there you remain in error. NNTP. (nothing notably transmitting
photons) protocol.

73's
Richard Clark, KB7QHC

1000. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 01:48:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb57m5$dr1$3@news.albasani.net>
Source record: 36767

Richard Clark wrote:

> ...
> 73's
> Richard Clark, KB7QHC

Yes, you are in error, NNTP is only a superset of smtp ... :-(

Regards,
JS

1001. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 02:28:39 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns999BC6260E582HuckleberryREMOVEbig@198.186.192.196>
Source record: 36768

Richard Clark <kb7qhc@comcast.net> wrote in
news:5f6cd3hpvoaet73kqa5sliindsh24ncqc3@4ax.com:

> On 30 Aug 2007 01:04:08 GMT, Ed G <Huckleberry_REMOVE_@bigvalley.net>
> wrote:
>
>> How is it that you guys are comparing the photon, a sub-atomic
>> particle
>>without mass, to electromagnetic radiation/waves? I don't see a
>>basis for comparison.....
>
> Hi Ed,
>
> Mass as a basis of comparison implied:
> How much do your electromagnetic radiation/waves weigh?
> How thick is sunlight on your arm while driving?
>
> If they don't compare, then these questions should reveal differences
> when light is substituted for waves (and versa-visa).
>
> 73's
> Richard Clark, KB7QHC
>

Sorry, the above just doesn't compute with me. I'll sit aside in
this thread and just watch.....

Ed

1002. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 02:50:19 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <LfqBi.48122$Um6.8971@newssvr12.news.prodigy.net>
Source record: 36769

Ed G wrote:
> How is it that you guys are comparing the photon, a sub-atomic particle
> without mass, to electromagnetic radiation/waves? I don't see a basis
> for comparison.....

EM waves are sets of coherent photons.
--
73, Cecil http://www.w5dxp.com

1003. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 03:05:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb5c5v$hg2$1@news.albasani.net>
Source record: 36770

Ed G wrote:

> ...
> Sorry, the above just doesn't compute with me. I'll sit aside in
> this thread and just watch.....
>
> Ed

Ed:

In a nut shell:

Light displays the qualities of consisting of photons AND waves.
Naturally the question arises, "Is light composed totally of one or the
other--or both?" (and, you can propose all sorts of side questions from
this one ...)

Some argue that this extends to rf also (at the top of the microwaves
there is the infrared, at least enough to gain ones' attention.) And,
some even go as far as to say rf is composed of photons--ONLY, but these
have wave qualities.

This URL should get you well established on the ground floor of this
ongoing debate and "friendly" argument:

http://en.wikipedia.org/wiki/Double-slit_experiment

Regards,
JS

1004. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 03:07:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb5caa$hg2$2@news.albasani.net>
Source record: 36771

Cecil Moore wrote:

> ...
> EM waves are sets of coherent photons.

Cecil:

I composed this thread with you in mind.

Welcome back from retirement. The level of argument you bring was
sorely missed. :-)

Regards,
JS

1005. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 03:19:06 UTC
From: jawod <jawod@fuse.net>
Message-ID: <46D6372A.9090702@fuse.net>
Source record: 36772

Cecil Moore wrote:
> Ed G wrote:
>
>> How is it that you guys are comparing the photon, a sub-atomic
>> particle without mass, to electromagnetic radiation/waves? I don't
>> see a basis for comparison.....
>
>
> EM waves are sets of coherent photons.

This is actually a good one. Planck, Newton and Feynman ... and missing quotations, nuclear emissions and internet arcana. Hello to Richard, Cecil and the rest and thanks for an enjoyable thread.

John
AB8O

PS, from a non-physicist perspective, "duality" is a concept that is fun to debate. There might be extra innings.

1006. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 03:26:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb5dco$n8n$1@news.albasani.net>
Source record: 36773

jawod wrote:

> ...
> This is actually a good one. Planck, Newton and Feynman ... and missing
> quotations, nuclear emissions and internet arcana. Hello to Richard,
> Cecil and the rest and thanks for an enjoyable thread.
>
> John
> AB8O
>
> PS, from a non-physicist perspective, "duality" is a concept that is fun
> to debate. There might be extra innings.

<evil grin>

Regards,
JS

1007. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 03:47:32 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1188445652.381082.21310@q3g2000prf.googlegroups.com>
Source record: 36774

On Aug 29, 5:35 pm, John Smith <assemblywiz...@gmail.com> wrote:
> K7ITM wrote:
>
> > ...
>
> > On the other hand, there's probably not much utility in discussing
> > photons of, say, a 14MHz signal, simply because the energy contained
> > in one quantum at that frequency is so small that you won't be able to
> > detect it: a little less than 10^-26 joules per photon. At one
> > photon per second, that's under 10^-26 watts, if you collect all the
> > energy. At 50 ohms, that's less than a picovolt. Noise in a 1Hz
> > bandwidth in a 50 ohm resistor at room temperature is about a
> > thousand times that much. -- Yes, the energy is quantized. But the
> > quanta are going to be _very_ difficult to distinguish.
>
> > Cheers,
> > Tom
>
> If there are, indeed, as many photons being emitted by the thin edge of
> the ribbon, as by the broad edges, what law/effect/affect is being
> demonstrated here?
>
> Or. why are the photons "drawn" to the thin edge with such magnitude of
> force?

The 14MHz photons are being emitted by the whole antenna, not by "broad edges" or "thin edges" as you suggest. You seem to be thinking of them as little tiny balls, or some such. That mental image just doesn't hold water. As I posted elsewhere in this thread, photons do not behave like billiard balls. They don't behave like anything you have encountered in the macro world we live in.

There are some decent "modern physics for the masses" books that will explain to you some of the behaviour that you will probably think very strange, if you are thinking in terms of how the macro particles you're familiar with behave. Even particles like electrons, neutrons and protons don't behave like large spheres. They have distinct "wave-like" behaviour.

As a start, it would probably help if you dropped "wave" and "photon" (particle) from your vocabulary when dealing with things like this and realize that the antenna emits a stream of quantized energy, with characteristics that can be described accurately without resorting to "particles" or "waves". If you had no idea what a passenger airplane was, but you were familiar with birds and busses,

would you get into a discussion about the new thing being a bird and not a bus, or a bus and not a bird? Or would you realize that it has some characteristics of each, but is neither, and deserves a description all its own? Quantized radiation is rather like that. You will NOT describe it accurately as either "waves" or "particles" (in the macro sense).

Cheers,
Tom

1008. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 03:55:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb5f4bpcg1@news.albasani.net>
Source record: 36775

The following of yours is very interesting, very descriptive and sounds very scientific.

So now, the only question left, which seems implied by you, is, "Do I get it?"

To which I reply, EUREKA! YES! Indeed, since we got rid of photons and waves--we are only left with quanta! And, if we now construct a "quanta-antenna", such as you imply, we can have a "160 meter earth scorcher" the size of pin head which is just as an efficient radiator as the MONSTER in my backyard!

Thanks for the explanation--I won't forget you for awhile! <grin>

Regards,
JS

K7ITM wrote:
> On Aug 29, 5:35 pm, John Smith <assemblywiz...@gmail.com> wrote:
>> K7ITM wrote:
>>
>> > ...
>>
>>> On the other hand, there's probably not much utility in discussing
>>> photons of, say, a 14MHz signal, simply because the energy contained
>>> in one quantum at that frequency is so small that you won't be able to
>>> detect it: a little less than 10^-26 joules per photon. At one
>>> photon per second, that's under 10^-26 watts, if you collect all the
>>> energy. At 50 ohms, that's less than a picovolt. Noise in a 1Hz
>>> bandwidth in a 50 ohm resistor at room temperature is about a
>>> thousand times that much. -- Yes, the energy is quantized. But the
>>> quanta are going to be _very_ difficult to distinguish.
>>> Cheers,
>>> Tom
>> If there are, indeed, as many photons being emitted by the thin edge of
>> the ribbon, as by the broad edges, what law/effect/affect is being
>> demonstrated here?
>>
>> Or. why are the photons "drawn" to the thin edge with such magnitude of
>> force?
>
> The 14MHz photons are being emitted by the whole antenna, not by
> "broad edges" or "thin edges" as you suggest. You seem to be thinking
> of them as little tiny balls, or some such. That mental image just
> doesn't hold water. As I posted elsewhere in this thread, photons do
> not behave like billiard balls. They don't behave like anything you

> have encountered in the macro world we live in.
>
> There are some decent "modern physics for the masses" books that will
> explain to you some of the behaviour that you will probably think very
> strange, if you are thinking in terms of how the macro particles
> you're familiar with behave. Even particles like electrons, neutrons
> and protons don't behave like large spheres. They have distinct "wave-
> like" behaviour.
>
> As a start, it would probably help if you dropped "wave" and
> "photon" (particle) from your vocabulary when dealing with things like
> this and realize that the antenna emits a stream of quantized energy,
> with characteristics that can be described accurately without
> resorting to "particles" or "waves". If you had no idea what a
> passenger airplane was, but you were familiar with birds and busses,
> would you get into a discussion about the new thing being a bird and
> not a bus, or a bus and not a bird? Or would you realize that it has
> some characteristics of each, but is neither, and deserves a
> description all its own? Quantized radiation is rather like that.
> You will NOT describe it accurately as either "waves" or
> "particles" (in the macro sense).
>
> Cheers,
> Tom
>

1009. Re: How to make a Stationmaster for hf ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 04:00:15 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1188446415.093573.10170@50g2000hsm.googlegroups.com>
Source record: 36776

VK3XL wrote:
> Hi all, do you remember the old CD Stationmaster antenna? It was a end
> fed 1/2 wave. I would like to make one and I believe there are plans
> around to describe how its done, but so far I have not been able to
> locate them on the net. Does anyone know of a link to such a page, or
> even a magazine article etc. My work Library is quite good with regard
> to old ham magasines etc.
>
> Any assistance is greatly appreciated.
> thanks for looking
> Mike
> VK3XL
>
>
>
>
> --
> VK3XL

I tried something similar in the past but had trouble with the
capacitors arcing at 100 watts. Better reults were obtained using a
stub made of ladder line. No coils No caps. Antenna was a temporary
half wavelength vertical made of 1 inch electrical conduit working
aginst a 6 wire groundplane. Base insulator was a beer bottle.

Jimmie

1010. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 05:22:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb5k68$1nf$1@news.albasani.net>
Source record: 36778

John Smith wrote:

> ...

The more I think about this, the clearer it gets.

What was wrong with me? Considering photons as little weightless,
billiard ball shaped "chunks" of energy?

I missed the boat, and early on--thick skulled and as slow as they come.
I now see 'em as cubes, tubes, polygons, irregular, indescribable,
ghostly, luminous, streaming strings ... of chunks of energy!

Yes, that is it, strings! And, it all fits! Dr. Michio Kaku has been
spouting string theory off the tops of high buildings for years--ahhh,
if only I'd had not been so dense--for so long ... :-(

Yes. This is quite better than my slow acceptance of the ether and "our
matter/energy" only existing as an "altered and unnatural form" of this
very same ether ...

I swear, sometimes I just need someone to save me from myself--my new
wife is beginning to, frequently, point this out to me--thank goodness!
Maybe next time, I just might have the good sense to listen. <grin>

Regards,
JS

1011. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 05:23:41 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1188451421.853251.170260@l22g2000prc.googlegroups.com>
Source record: 36779

On Aug 29, 8:55 pm, John Smith <assemblywiz...@gmail.com> wrote:
> The following of yours is very interesting, very descriptive and sounds
> very scientific.
>
> So now, the only question left, which seems implied by you, is, "Do I
> get it?"
>
> To which I reply, EUREKA! YES! Indeed, since we got rid of photons and
> waves--we are only left with quanta! And, if we now construct a
> "quanta-antenna", such as you imply, we can have a "160 meter earth
> scorcher" the size of pin head which is just as an efficient radiator as
> the MONSTER in my backyard!
>
> Thanks for the explanation--I won't forget you for awhile! <grin>
>
> Regards,
> JS

Hey, great job of leaping to confusion, John! ;-)

1012. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 05:26:15 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <GxsBi.3695$Y7.2965@bignews3.bellsouth.net>
Source record: 36780

>
> The photon/wave properties of rf still remains a mystery ... and proof
> hard to come by.
>
> Regards,
> JS

My photon emitters are: a flashlight, TV, computer monitor
and
my photon receivers are : eyes, cameras, and binoculars
my antenna only reflects incidental photons.
The amount of photons reflected is proportional to the exposed surface area.
amazing.
can you capture a photon and release it at Will?
Would Will need to duck, or would blinking suffice?
Is a photon a particle, or does it conform to the wave theory?
Since light cannot escape a black hole, can we assume light consists of
particles with mass?
Can these particles move slower than the so-called 'speed of light'?
Does high tide affect the speed of a photon?
At what point does a gravity wave affect a photon or light wave?
These questions need answers, gentlemen, so lets get with it.
Let me know when you're done.

1013. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 05:32:33 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13dcljlrausna18@corp.supernews.com>
Source record: 36781

K7ITM wrote:r
> . . .If you had no idea what a
> passenger airplane was, but you were familiar with birds and busses,
> would you get into a discussion about the new thing being a bird and
> not a bus, or a bus and not a bird?
> . . .

I know the answer to that one! And I also know who would be making the majority of the postings.

Roy Lewallen, W7EL

1014. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 05:43:02 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns999C9FDC355EFnonenowhere@61.9.191.5>
Source record: 36782

Roy Lewallen <w7el@eznec.com> wrote in news:13dcljlrausna18
@corp.supernews.com:

> I know the answer to that one! And I also know who would be making the
> majority of the postings.

... but, more importantly the last posting.

Owen

1015. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 05:53:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb5m1m$4vr$1@news.albasani.net>
Source record: 36783

K7ITM wrote:

> ...
> Hey, great job of leaping to confusion, John! ;-)
>

In ancient Sanskrit writings, written on palm leaves, in India,
long-long-ago, they described EVERYTHING only consisting of vibrations
(matter/energy) ... vibrational planes (dimensions), etc.

Perhaps, in the end, we will understand what they described ... or not.

Until then, let's have some fun. <grin>

Regards,
JS

1016. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 10:11:22 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns999CCD5A9612Anonenowhere@61.9.191.5>
Source record: 36784

Jim Lux <james.p.lux@jpl.nasa.gov> wrote in news:46D463CF.1080309
@jpl.nasa.gov:

> Dave Oldridge wrote:
>> Owen Duffy <none@no.where> wrote in news:Xns999955EE72868nonenowhere@
>> 61.9.191.5:
>>
>>
>>>Dave Oldridge <doldridg@leavethisoutshaw.ca> wrote in
>>>news:Xns999897D777889doldridgsprintca@64.59.135.159:
>>>
>>>
>>>>Near as I could measure it, the NF of the receiver after my mod was
>>>>1.2db. I had to resort to boiling and freezing water and a tiny
dummy
>>>>load to measure it at all.
>>>
> <snip>
>
>>
>> This
>>
>>>still demands high resolution measurement of noise power.
>>
>>
>> Yes, anything less than 4 digits is just about useless.
>
> That would be necessary but not sufficient.
...

Just following through on the '4 digit' issue...

I have done two series of 250 measurements of audio noise voltage from a SSB receiver using two different digital multimeters, the 9932 is a modern digital multimeter that is NOT true RMS responding, and the 506 is a modern digital multimeter that is true RMS responding with bandwidth adequate to cover the receiver output response.

From observation with a stopwatch, I estimate that the 9932 updates 3 times per second, and the 506 updates 2 times per second. The integration times are probably .33 and .5 seconds respectively.

I have measured the receiver equivalent noise bandwidth and it is 1600Hz.

95% of 250 readings were within 0.41dB for the 9932 and 0.31dB for the 506. These observations reconcile well with my Chi-squared based estimate

of the uncertainty that I referred to in an earlier post.

As for the number of digits, they are both 4 digit multimeters which doesn't mean a lot. They were used to measure 200mV with 1mV resolution, so the representational error is 0.04dB. The error due to the number of digits in this downscale three digit application is insignificant compared to the sampling error of 0.4dB and 0.3dB.

Graphically, the distributions are shown at http://www.vk1od.net/nfm/temp.gif .

Different meters with different integration times, and different receivers with different noise bandwidth will result in different outcomes, but I argue that the uncertainty is predictable.

Owen

1017. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 12:01:00 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1188475260.133170.268110@r34g2000hsd.googlegroups.com>
Source record: 36785

>
> EM waves are sets of coherent photons.
> --
> 73, Cecil http://www.w5dxp.com

So Cecil , what should I call incoherent photons?
<and welcome back>

Anyway, back at the ranch, no one has brought up quantum electrodynamics (Feynman would be unhappy - since all the photons leaving the surface of the white hot, rotating, razor blade will occupy all possible paths from there to your eye - including having all of them emanate only from the razor's edge for an instant)

And, no one has invoked Schroedinger since looking at that photon will cause it to disappear...

Now, let me discuss Alice - had Alice taken more of the potion and grown large enough that the lens and retina of her eyes were millions of 80 meter wavelengths across, she would indeed see your antenna glow with pulses of 'light' as you key your transmitter, dit dit dit dahhhhhh...

Speaking of which, I now feel the urge to put Beethoven's Fifth on the turntable...

denny

1018. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 12:03:57 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1188475437.940817.140440@g4g2000hsf.googlegroups.com>
Source record: 36786

Yes, that is it, strings!
****

JS, you are falling behind, it is now branes, not strings...

Geez, keep up man!

denny / k8do

1019. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 12:15:47 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1188476147.745750.312460@r29g2000hsg.googlegroups.com>
Source record: 36787

> can you capture a photon and release it at Will?
YES, DONE WITH LASERS IN A COLD TRAP

> Would Will need to duck, or would blinking suffice?
DEPENDS UPON THE ENERGY OF THE PHOTON - IF IT IS A GAMMA, THEN DUCK!
> Is a photon a particle, or does it conform to the wave theory?
YES
> Since light cannot escape a black hole, can we assume light consists of
> particles with mass?
NO. IT IS ENERGY AND E=MC^2
> Can these particles move slower than the so-called 'speed of light'?
YUP.... REMEMBER SPEED IS PROPORTIONAL TO TIME AND TIME IS
PROPORTIONAL TO VELOCITY IT IS ALL RELATIVE
> Does high tide affect the speed of a photon?
YUP BUT MY STOPWATCH HAS TROUBLE WITH SUCH SMALL TIME CHANGES
> At what point does a gravity wave affect a photon or light wave?
AT ALL POINTS
> These questions need answers, gentlemen, so lets get with it.
> Let me know when you're done.
DONE

WHAT DO I WIN?

denny / k8do

BTW, while this is done in the spirit of fun all answers are accurate
as best I can make them based on my understanding of physics

1020. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 12:26:29 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fb6d1l$18vi$1@f04n12.cac.psu.edu>
Source record: 36788

Denny wrote:
> Yes, that is it, strings!
> **********
>
> JS, you are falling behind, it is now branes, not strings...
>
> Geez, keep up man!

I'm having trouble keepin' up too! Lemme get this straight.... If we visualize the photons as little burritos or somethin' like that...

Or maybe one of those moose toy things that when you pull the tail it poops little jellybeans?

ARrgh!

1021. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 12:55:31 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <77zBi.21956$eY.18767@newssvr13.news.prodigy.net>
Source record: 36789

jawod wrote:
> PS, from a non-physicist perspective, "duality" is a concept that is fun
> to debate.

For some individuals, it is a thorn in the side. :-)
--
73, Cecil http://www.w5dxp.com

1022. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 13:07:02 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <UhzBi.450$4J3.389@newssvr22.news.prodigy.net>
Source record: 36790

John Smith wrote:
> Yes, that is it, strings!

String theory does seem to resolve the
wave-particle "duality" problem.
--
73, Cecil http://www.w5dxp.com

1023. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 13:22:47 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <HwzBi.12546$3x.11362@newssvr25.news.prodigy.net>
Source record: 36791

John Smith wrote:
> In ancient Sanskrit writings, written on palm leaves, in India,
> long-long-ago, they described EVERYTHING only consisting of vibrations
> (matter/energy) ... vibrational planes (dimensions), etc.

The ancient Summerians made a drawing of our
solar system including Uranus and Pluto which
are invisible to the naked eye.
--
73, Cecil http://www.w5dxp.com

1024. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 13:32:17 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb6gte$3kc$1@news.albasani.net>
Source record: 36792

Denny wrote:

> ...
> WHAT DO I WIN?
>
> denny / k8do
>
> BTW, while this is done in the spirit of fun all answers are accurate
> as best I can make them based on my understanding of physics
>

For that, you get the golden quantum badge of know-it-all-ism. However,
it has been misplaced; and, everyone is claiming they never touched
it--only looked at it!

Regards,
JS

1025. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 13:32:24 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <IFzBi.12547$3x.11437@newssvr25.news.prodigy.net>
Source record: 36793

Denny wrote:
> So Cecil , what should I call incoherent photons?

I'm not sure but I'm pretty sure you cannot
call them a single wave (function).

> Speaking of which, I now feel the urge to put Beethoven's Fifth on the
> turntable...

I prefer Glenlivet's fifth on my table.
--
73, Cecil http://www.w5dxp.com

1026. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 13:34:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb6h24$3kc$2@news.albasani.net>
Source record: 36794

Cecil Moore wrote:

> ...
> The ancient Summerians made a drawing of our
> solar system including Uranus and Pluto which
> are invisible to the naked eye.

Well, I make fun of "them", "it" and "their writings", however--I
probably shouldn't ...

Regards,
JS

1027. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 13:35:48 UTC
From: Dean Craft <harolddcraft@bellsouth.net>
Message-ID: <EIzBi.74849$jH3.38271@bignews6.bellsouth.net>
Source record: 36795

Owen Duffy wrote:
> Roy Lewallen <w7el@eznec.com> wrote in news:13dcljlrausna18
> @corp.supernews.com:
>
>> I know the answer to that one! And I also know who would be making the
>> majority of the postings.
>
> .... but, more importantly the last posting.
>
> Owen

And describing those who did not agree with him as idiots and fools!

Dean -- W4IHK

1028. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 13:46:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb6hnr$3kc$3@news.albasani.net>
Source record: 36796

Dean Craft wrote:

> ...
> And describing those who did not agree with him as idiots and fools!
>
> Dean -- W4IHK
>

Well, that is certainly one way to look at it.

Another might be:

Fools simply stop asking questions, accept mysteries, have a religious devotion to the idea, "All is already known!", shout at all who keep looking in cupboards for clues, etc., etc. ... time has a way of working some of this out.

Regards,
JS

1029. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 14:20:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b6kdd35cj1i57tq03c7rimt2neg6ughs51@4ax.com>
Source record: 36797

On Thu, 30 Aug 2007 10:11:22 GMT, Owen Duffy <none@no.where> wrote:

>they are both 4 digit multimeters which
>doesn't mean a lot. They were used to measure 200mV with 1mV resolution,

Hi Owen,

The convention for decades has been to describe them as 3ï¿½ Digits, or 2000 count, not 4 digit unless they could represent 9999. Adding digits does not generally add precision, resolution, monotonicity, or accuracy. However, as it costs money to add a digit, the underlying circuitry could usually support "some" of these attributes. Better instruments perform rounding after the last digit.

73's
Richard Clark, KB7QHC

1030. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 15:15:04 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fb6mtv$14oo$1@f04n12.cac.psu.edu>
Source record: 36798

John Smith wrote:
> Dean Craft wrote:
>
> > ...
>> And describing those who did not agree with him as idiots and fools!
>>
>> Dean -- W4IHK
>>
>
> Well, that is certainly one way to look at it.
>
> Another might be:
>
> Fools simply stop asking questions, accept mysteries, have a religious
> devotion to the idea, "All is already known!", shout at all who keep
> looking in cupboards for clues, etc., etc. ... time has a way of working
> some of this out.

I don't know anyone here that is that way. I do know people who have the temerity to question wild claims, and not accept them as fact until good and compelling proof is offered, or if it at least "works" to a close approximation. It is a mark of wisdom to understand that is prudent, not foolish.

Has a person stopped asking questions if they ask a question about some new and unproven concept?

The idea is to answer or discuss the question, not deride the questioner.

Otherwise we sound like:

Person 1: Boy the US healthcare system has some big problems

Person 2: LIBERAL!

Person 1: It's hot out today.

Person 2: LIBERAL!

- 73 de Mike KB3EIA -

1031. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 15:29:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb6npgigi1@news.albasani.net>
Source record: 36799

Ohhh boy, another can of worms.

1) One mans poison is anothers' medicine.
2) People learn, a fool today--a genius tomorrow.
3) The three blind men go to see the elephant.
4) Mistakes are forgive-able.
5) etc.
6) etc.

I am afraid with your offering, I cannot offer fitting argument ... we
live, we learn.

Regards,
JS

Michael Coslo wrote:

> I don't know anyone here that is that way. I do know people who have
> the temerity to question wild claims, and not accept them as fact until
> good and compelling proof is offered, or if it at least "works" to a
> close approximation. It is a mark of wisdom to understand that is
> prudent, not foolish.
>
> Has a person stopped asking questions if they ask a question about
> some new and unproven concept?
>
> The idea is to answer or discuss the question, not deride the
> questioner.
>
> Otherwise we sound like:
>
> Person 1: Boy the US healthcare system has some big problems
>
> Person 2: LIBERAL!
>
> Person 1: It's hot out today.
>
> Person 2: LIBERAL!
>
>
>
> - 73 de Mike KB3EIA -
>
>

1032. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 15:30:23 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1188487823.746954.130050@k79g2000hse.googlegroups.com>
Source record: 36800

On 30 Aug, 08:15, Michael Coslo <m...@psu.edu> wrote:
> John Smith wrote:
> > Dean Craft wrote:
>
> > > ...
> >> And describing those who did not agree with him as idiots and fools!
>
> >> Dean -- W4IHK
>
> > Well, that is certainly one way to look at it.
>
> > Another might be:
>
> > Fools simply stop asking questions, accept mysteries, have a religious
> > devotion to the idea, "All is already known!", shout at all who keep
> > looking in cupboards for clues, etc., etc. ... time has a way of working
> > some of this out.
>
> I don't know anyone here that is that way. I do know people who have
> the temerity to question wild claims, and not accept them as fact until
> good and compelling proof is offered, or if it at least "works" to a
> close approximation. It is a mark of wisdom to understand that is
> prudent, not foolish.
>
> Has a person stopped asking questions if they ask a question about some
> new and unproven concept?
>
> The idea is to answer or discuss the question, not deride the questioner.
>
> Otherwise we sound like:
>
> Person 1: Boy the US healthcare system has some big problems
>
> Person 2: LIBERAL!
>
> Person 1: It's hot out today.
>
> Person 2: LIBERAL!
>
> - 73 de Mike KB3EIA -- Hide quoted text -
>
> - Show quoted text -

John, to debate Proton s is to first describe it correctly.
Some would say that protons are without mass and composed only
of energy and onlso have momentum! Newton is quite clear that one has
to have mass to have momentum
and all the masters would state that you can't have equilibrium if a
photon does not have mass.
With respect to waves scientists state there are two types of waves!
It would appear that more experimentation is to take place before this
can be resoved.
Art

1033. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 16:10:25 UTC
From: richardharrison@webtv.net
Message-ID: <1699-46D6EBF1-306@storefull-3251.bay.webtv.net>
Source record: 36801

John Smith wrote:
"The photon/wave properties of rf still remains a mystery ... and proof is hard to come by."

Proof of the wave property is abundant. Electrical energy escapes into free space in the form of waves. Countless observations prove it.
The wavefront is composed of the electric and magnetic fields at right angles to each other and both are at right angles to the direction of travel.

Direction of the electric flux is called the polarization of the wave.

Voltage on a wire properly aligned with the electric field varies along the length of the wire and not very much across the width of the wire.

Best regards, Richard Harrison, KB5WZI

1034. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 16:53:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cdrdd3hlune742ep2vpje58n4ud48qs9t1@4ax.com>
Source record: 36802

On Thu, 30 Aug 2007 08:30:23 -0700, art <aunwin@insightbb.com> wrote:

>With respect to waves scientists state there are two types of waves!

Hi Arthur,

They would (without breathless exclamation) explain they are ordinary and for centuries have been called transverse and longitudinal.

>It would appear that more experimentation is to take place before this
>can be resoved.

For those same centuries, experimentation has been ongoing and has no implied necessity of stopping to ponder (aka resolving) any new wonder of Physics. The only surprise can come from one who misapplies these conventional terms - NEWS at 11!

In that regard, the news is sadly of the Fox headlines variety that streams across the screen below creationist-intellectuals (sic) screaming about the pollution of science (sic) with humanistic left-wing bias. Those snippets of disneyfied science will inform (sic) you about mind control through sonic waves never before known (sic) to have that ability.

A scientist would explain it was due to enormous power levels compressing the medium to non-linearity wherein a second source could mix with it to produce heterodyning. The second source could be modulated with a voice such that the target (a person) would hear "God speaking to them." That being the breathlessly announced mind control. I should quickly modify that with: a scientist would attempt to explain, but sonic mind control of the rather more prosaic means of yelling would overwhelm him, followed by a break for a commercial and the hosts' call for Fox security to take the heretic away.

Sound, by the way, consists of both transverse and longitudinal wave components. This becomes meaningful if your detector (antenna) is small in relation to the wavelength. And as few relate Photons to sound, they should be advised the two are quite integral to the most commonplace reactions. For some, this may take quite some time to resolve.

73's
Richard Clark, KB7QHC

1035. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 17:32:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb6v0dedc1@news.albasani.net>
Source record: 36803

Richard Harrison wrote:
> John Smith wrote:
> "The photon/wave properties of rf still remains a mystery ... and proof
> is hard to come by."
>
> Proof of the wave property is abundant. Electrical energy escapes into
> free space in the form of waves. Countless observations prove it.
> ...
> Best regards, Richard Harrison, KB5WZI
>

Richard:

You sing to the choir, and waves need a media to propagate through/on
... plus, just as an extra kicker, they appear enough as particles to
have an arguable point--which brings us here.

Well, unless that thinking is wrong and there is no ether (medium.)
And, radio "waves" are nothing but flying packets of energy stings ...
<scratches head>

Warmest regards,
JS

1036. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 17:42:46 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fb6vim$h4m$1@news.jpl.nasa.gov>
Source record: 36804

Owen Duffy wrote:
> Jim Lux <james.p.lux@jpl.nasa.gov> wrote in news:46D463CF.1080309
> @jpl.nasa.gov:
>
>
>>Dave Oldridge wrote:
>>
>>>Owen Duffy <none@no.where> wrote in news:Xns999955EE72868nonenowhere@
>>>61.9.191.5:
>>>
>>>
>>>
>>>>Dave Oldridge <doldridg@leavethisoutshaw.ca> wrote in
>>>>news:Xns999897D777889doldridgsprintca@64.59.135.159:
>>>>
>>>>
>>>>
>>>>>Near as I could measure it, the NF of the receiver after my mod was
>>>>>1.2db. I had to resort to boiling and freezing water and a tiny
>
> dummy
>
>>>>>load to measure it at all.
>>>>
>><snip>
>>
>>>This
>>>
>>>
>>>>still demands high resolution measurement of noise power.
>>>
>>>
>>>Yes, anything less than 4 digits is just about useless.
>>
>>That would be necessary but not sufficient.
>
> ...
>
> Just following through on the '4 digit' issue...
>
> I have done two series of 250 measurements of audio noise voltage from a
> SSB receiver using two different digital multimeters, the 9932 is a
> modern digital multimeter that is NOT true RMS responding, and the 506 is
> a modern digital multimeter that is true RMS responding with bandwidth

> adequate to cover the receiver output response.
>
> From observation with a stopwatch, I estimate that the 9932 updates 3
> times per second, and the 506 updates 2 times per second. The integration
> times are probably .33 and .5 seconds respectively.
>
> I have measured the receiver equivalent noise bandwidth and it is 1600Hz.
>
> 95% of 250 readings were within 0.41dB for the 9932 and 0.31dB for the
> 506. These observations reconcile well with my Chi-squared based estimate
> of the uncertainty that I referred to in an earlier post.
>
> As for the number of digits, they are both 4 digit multimeters which
> doesn't mean a lot. They were used to measure 200mV with 1mV resolution,
> so the representational error is 0.04dB.

Gotta be a bit careful there, because quantization error has a uniform distribution, so the variance is 1/12 of the span. This is different than the (presumably) normally distributed actual measurands.

When giving an uncertainty (sampling error), one should also say whether it's a one sigma, two sigma, or 3 sigma number. *Standard uncertainty* is 1 sigma... *expanded uncertainty*, often given as a +/- number is usually the 95% percent confidence interval, which, for normal distributions, is 2 sigma

given your statistics above, you would be giving the expanded uncertainty as 0.41dB

By the way, unless your device actually directly measures dB (e.g. it has a log detector) or the errors are inherently ratios, it's probably better to give the value in a linear scale (milliwatts?) with the uncertainty in the same units. That gets you around the "ratio" problem where log(1+delta) <> -log(1-delta)

http://physics.nist.gov/cuu/Uncertainty/index.html has the simple explanation, and the technical note (TN1297) , and references to the ISO Guide to Expression of Uncertainty in Measurment (aka the GUM)

The error due to the number of
> digits in this downscale three digit application is insignificant
> compared to the sampling error of 0.4dB and 0.3dB.
>
> Graphically, the distributions are shown at
> http://www.vk1od.net/nfm/temp.gif .
>
> Different meters with different integration times, and different
> receivers with different noise bandwidth will result in different
> outcomes, but I argue that the uncertainty is predictable.

Indeed, it is.

>
> Owen

1037. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 19:20:20 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1188501620.449625.275190@z24g2000prh.googlegroups.com>
Source record: 36805

On 30 Aug, 10:32, John Smith <assemblywiz...@gmail.com> wrote:
> Richard Harrison wrote:
> > John Smith wrote:
> > "The photon/wave properties of rf still remains a mystery ... and proof
> > is hard to come by."
>
> > Proof of the wave property is abundant. Electrical energy escapes into
> > free space in the form of waves. Countless observations prove it.
> > ...
> > Best regards, Richard Harrison, KB5WZI
>
> Richard:
>
> You sing to the choir, and waves need a media to propagate through/on
> ... plus, just as an extra kicker, they appear enough as particles to
> have an arguable point--which brings us here.
>
> Well, unless that thinking is wrong and there is no ether (medium.)
> And, radio "waves" are nothing but flying packets of energy stings ...
> <scratches head>
>
> Warmest regards,
> JS

Agreed. Evidence is that the particles are separated from its
companion radiator
into space and those that do not escape are drawn back to the
radiatior where it decay's.
There is no "abundance" of evidence to either side of the particle
wave debate,
only the evidence that has been chosen for the moment at least until
the printer of science books get back to work again.
Ofcourse some say if it is in a book then that is what is correct,
just like on the web!
Of course if one considers that a particle that is projected into
space creates a magnetic field
then the question is what came first, the particulate or the magnetic
field of constant polarity.
Art

1038. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 20:27:48 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1188505668.487447.301170@q5g2000prf.googlegroups.com>
Source record: 36806

On Aug 30, 9:32 am, Cecil Moore <nos...@w5dxp.com> wrote:
> Denny wrote:
> > So Cecil , what should I call incoherent photons?
>
> I'm not sure but I'm pretty sure you cannot
> call them a single wave (function).
>
> > > Speaking of which, I now feel the urge to put Beethoven's Fifth on the
> > > turntable...
>
> I prefer Glenlivet's fifth on my table.
> --
> 73, Cecil http://www.w5dxp.com

Ahhha, so that's where the incoherent photons come from!

1039. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 21:45:57 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns999D4EF9BC899nonenowhere@61.9.191.5>
Source record: 36808

Jim Lux <james.p.lux@jpl.nasa.gov> wrote in
news:fb6vim$h4m$1@news.jpl.nasa.gov:

> Owen Duffy wrote:
>>
>> ...
>>
>> Just following through on the '4 digit' issue...
>>
>> I have done two series of 250 measurements of audio noise voltage
>> from a SSB receiver using two different digital multimeters, the 9932
>> is a modern digital multimeter that is NOT true RMS responding, and
>> the 506 is a modern digital multimeter that is true RMS responding
>> with bandwidth adequate to cover the receiver output response.
>>
>> From observation with a stopwatch, I estimate that the 9932 updates 3
>> times per second, and the 506 updates 2 times per second. The
>> integration times are probably .33 and .5 seconds respectively.
>>
>> I have measured the receiver equivalent noise bandwidth and it is
>> 1600Hz.
>>
>> 95% of 250 readings were within 0.41dB for the 9932 and 0.31dB for
>> the 506. These observations reconcile well with my Chi-squared based
>> estimate of the uncertainty that I referred to in an earlier post.
>>
>> As for the number of digits, they are both 4 digit multimeters which
>> doesn't mean a lot. They were used to measure 200mV with 1mV
>> resolution, so the representational error is 0.04dB.
>
>
> Gotta be a bit careful there, because quantization error has a uniform
> distribution, so the variance is 1/12 of the span. This is different
> than the (presumably) normally distributed actual measurands.

Ok, point taken. I think more correctly, the maximum error would be 20
*log(1+1/200/2) or 0.0217dB.

The expected error due to representation in three digits does not account
for the variation in measurements.

>
> When giving an uncertainty (sampling error), one should also say
> whether it's a one sigma, two sigma, or 3 sigma number. *Standard
> uncertainty* is 1 sigma... *expanded uncertainty*, often given as a

> +/- number is usually the 95% percent confidence interval, which, for
> normal distributions, is 2 sigma

Whilst it might be reasonable to assume that the combined error in measurement of a high S/N sine wave voltage might be normally distributed, and that might also be true of measurement of noise voltage in some circumstances, I propose that measurement of noise power in narrow bandwidth with short integration times is distributed as Chi-squared and the number of samples becomes relevant in determining the number of degrees of freedom for the distribution. For this reason, I have talked about a confidence level rather than sigma (which is more applicable to normally distributed data).

Just for interest, in the case of the 9932 measurement set:

Average=0.201, sigma=0.0046, 1sigma based uncertainty estimate=0.20dB, 2sigma based uncertainty estimate=0.41dB, 3sigma based uncertainty estimate=0.62dB.

>
>
> given your statistics above, you would be giving the expanded
> uncertainty as 0.41dB

I stated it as 95% of obs within 0.41, I should have said 95% of obs within +/-0.41, I was explicit about the implied confidence, the 95% doesn't equate to either the 1sigma or 3sigma confidence, it is very close to the 2sigma confidence (95.45%), and it is at the high confidence end of the scale.

>
> By the way, unless your device actually directly measures dB (e.g. it
> has a log detector) or the errors are inherently ratios, it's probably
> better to give the value in a linear scale (milliwatts?) with the
> uncertainty in the same units. That gets you around the "ratio"
> problem where log(1+delta) <> -log(1-delta)

I understand what you mean in your last sentence.

I did record the voltage, and converted the values to dB for analysis. The interval was calculated by taking the average of the 2.5 percentile and 97.5 percentile, which is an approximation, but as such small values is pretty close.

I have converted results to dB to make it easier to see the relevance of the error or uncertainty, but in so doing, another (small in this case) error is introduced.

>
> http://physics.nist.gov/cuu/Uncertainty/index.html has the simple
> explanation, and the technical note (TN1297) , and references to the
> ISO Guide to Expression of Uncertainty in Measurment (aka the GUM)

In terms of the above, I am proposing that measurements of narrowband noise with short integration time is not strictly normally distributed, and an estimate of its uncertainty to a given confidence level can be obtained from the Chi-square distribution.

One could not estimate the results of the test from knowledge of the instrument accuracy (inherent and representational error) alone.

I think the experiment supports the proposition that digital multimeters with typically short integration times do not deliver high resolution measurement of narrow band (eg SSB telephony) noise.

> The error due to the number of
>> digits in this downscale three digit application is insignificant
>> compared to the sampling error of 0.4dB and 0.3dB.
>>
>> Graphically, the distributions are shown at
>> http://www.vk1od.net/nfm/temp.gif .
>>
>> Different meters with different integration times, and different
>> receivers with different noise bandwidth will result in different
>> outcomes, but I argue that the uncertainty is predictable.
>
> Indeed, it is.

Thanks, appreciate the comments.

Owen

1040. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 21:46:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb7dra$fb8$1@news.albasani.net>
Source record: 36807

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

Some of the "illustrious engineers" here are going to have to hop right
on this one and tell 'em that it just ain't fast enough to do what they
are claiming!!! I am sure they will be embarrassed all over themselves
and thankful ... <smirk>

http://www.cepro.com/article/intellon_to_provide_homeplug_10_with_turbo_solution_for_broad
band_connectiv/K3

Regards,
JS

1041. What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 21:52:12 UTC
From: Radium <glucegen1@gmail.com>
Message-ID: <1188510732.103951.83430@q5g2000prf.googlegroups.com>
Source record: 36809
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

Hi:

What is the highest radio frequency used for astronomy? Is it 3,438
GHz?

According to the link below, it is 3,438 GHz:

http://books.nap.edu/openbook.php?record_id=11719&page=11

Is 3,438 GHz the highest radio frequency used for astronomy?

Thanks,

Radium

1042. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 22:08:02 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <tpGdnT3YW61U3ErbnZ2dneKdnZydnZ2d@bt.com>
Source record: 36810
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

"Radium" <glucegen1@gmail.com> wrote in message
news:1188510732.103951.83430@q5g2000prf.googlegroups.com...
> Hi:
>
> What is the highest radio frequency used for astronomy? Is it 3,438
> GHz?
>
> According to the link below, it is 3,438 GHz:
>
> http://books.nap.edu/openbook.php?record_id=11719&page=11
>
> Is 3,438 GHz the highest radio frequency used for astronomy?
>
>
> Thanks,
>
> Radium
>

Radium

As the article suggests, higher frequencies are considered as being in the infra red wavelengths of light, so 3,438 GHz can be considered to be at the upper limits of radio frequency astronomy.

Visible light, ultra violet light, x-rays and gamma rays are all electromagnetic waves at higher frequencies and are also used for astronomy observations and experiments. Satellites are generally used to observe in the ultra violet, x-ray and gamma ray spectrums as these wave lengths are largely absorbed by the earth's atmosphere.

Remember, there are no strict cut off frequencies where one type of electromagnetic wave becomes another type. Radio merges into infra red which merges into visible light, ultra violet, x-rays and so on. Any limits are purely arbitary ones applied by humans in order to categorise the way in which electromagnetic waves of a certain frequency can be expected to behave.

Look at a colour palette. It is easy to pick out the primary colours. Everyone who isn't colour blind can pick out red, blue, green, yellow etc. But where do you draw the line to decide where red becomes green, blue or yellow? The colours slowly merge from one to another just as the characteristics of radio waves change as frequency increases.

Mike G0ULI

1043. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 22:31:56 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb7gh8$i31$1@news.albasani.net>
Source record: 36811

art wrote:

> ...
> only the evidence that has been chosen for the moment at least until
> the printer of science books get back to work again.
> Ofcourse some say if it is in a book then that is what is correct,
> just like on the web!
> ...
> Art

Art:

When we make this final leap, explain that one-more-thing which will trigger that flood of understanding, that revelation, that epiphany--we will only look back and marvel that it took us so long--that we were so close, for so long ...

An example is the atomic bomb. We always knew that if you pile up a lot of pure radioactive material--you get heat--we speculated with a great belief that an explosion from this process was possible. But putting it all together, getting the right isotope with the extra atomic particles available and a system to SLAM! enough of the material together (~2.2Kg) and an "exploding bottle" of force to surround it and keep it together so it didn't just melt/vaporize/weak-poof but would burst out in a healthy explosion, until then, we hadn't really discovered the atomic bomb ...

We stand such a threshold now, this "silence of new discovery" only leads before the "storm of revelation(s)", that very next step may take us there ... or, so I hope.

Somewhere out there is the mind(s) which will accomplish it. We simply need to continue the discussion and search--keep the candle in the window.

Simply put, we need an Einstein and a Manhattan Project.

Or, perhaps we only just need a bunch more high IQ "kooks" in their basements with wires and reactances--thinking and building from their imaginations.

Regards,
JS

1044. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 22:35:47 UTC
From: dplatt@radagast.org
Message-ID: <3btjq4-cq6.ln1@radagast.org>
Source record: 36813
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

>What is the highest radio frequency used for astronomy? Is it 3,438
>GHz?
>
>According to the link below, it is 3,438 GHz:
>
>http://books.nap.edu/openbook.php?record_id=11719&page=11
>
>Is 3,438 GHz the highest radio frequency used for astronomy?

That's very much a matter of convention. It all depends what you choose to call "radio frequency" and what you choose to call something else.

As the article you cite points out, the measurements at 3438 GHz (3.438 THz) blur the lines between microwave measurements (which many would call "radio") and far-infrared measurements (which may would not call "radio frequency").

One source I see gives a frequency of 3.0 THz as the boundary between "microwave" and "infrared". That boundary point is, I believe, entirely one of human convention - there's no magical change in the behavior of the signals as you cross from one side of this frequency to the other.

If you choose to treat the conventional boundary point of 3.0 THz as being significant for the purpose of your question, then one would have to say that the 3,438 GHz measurements you refer to are *not* "radio frequency" measurements, but rather "far-infrared" measurements.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

1045. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 22:46:46 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns999D59496EE73nonenowhere@61.9.191.5>
Source record: 36812

Richard Clark <kb7qhc@comcast.net> wrote in
news:b6kdd35cj1i57tq03c7rimt2neg6ughs51@4ax.com:

> On Thu, 30 Aug 2007 10:11:22 GMT, Owen Duffy <none@no.where> wrote:
>
>>they are both 4 digit multimeters which
>>doesn't mean a lot. They were used to measure 200mV with 1mV
resolution,
>
> Hi Owen,
>
> The convention for decades has been to describe them as 3½ Digits, or
> 2000 count, not 4 digit unless they could represent 9999. Adding
> digits does not generally add precision, resolution, monotonicity, or
> accuracy. However, as it costs money to add a digit, the underlying
> circuitry could usually support "some" of these attributes. Better
> instruments perform rounding after the last digit.

Hi Richard,

It is interesting in marketing hype that reference is made to 2 digit and 3 digit instruments, which implies a log based metric (10*log (MaxReading)) when you assume a 'full count', and the same hype refers to the upper digit if it can only have values of 0 or 1 as half a digit, whereas it probably has a weight of log(0.5) or 0.3... so in utility terms, a 2 1/2 digit instrument is really a 2.3 digit instrument.

In my case, I was making the measurements straddling 200mV, so I needed a bit of headroom for outliers, say 1dB or 225mV fsd, so it was effectively 2.35 digit instrument if you followed that argument.

Nevertheless, the error introduced by the resolution issue and instrument accuracy does not explain the experimental results... something else is happening, and one needs to look beyond the instrument itself to form a realistic view of measurement uncertainty when measuring narrowband noise.

Owen

1046. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 23:31:15 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <-q2dnadn97rczkrbnZ2dnUVZ_ualnZ2d@comcast.com>
Source record: 36814
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

"Dave Platt" <dplatt@radagast.org> wrote in message
news:3btjq4-cq6.ln1@radagast.org...
> >What is the highest radio frequency used for astronomy? Is it 3,438
>>GHz?
>>
>>According to the link below, it is 3,438 GHz:
>>
>>http://books.nap.edu/openbook.php?record_id=11719&page=11
>>
>>Is 3,438 GHz the highest radio frequency used for astronomy?
>
> That's very much a matter of convention. It all depends what you
> choose to call "radio frequency" and what you choose to call something
> else.
>
> As the article you cite points out, the measurements at 3438 GHz
> (3.438 THz) blur the lines between microwave measurements (which many
> would call "radio") and far-infrared measurements (which may would not
> call "radio frequency").
>
> One source I see gives a frequency of 3.0 THz as the boundary between
> "microwave" and "infrared". That boundary point is, I believe,
> entirely one of human convention - there's no magical change in the
> behavior of the signals as you cross from one side of this frequency
> to the other.
>
> If you choose to treat the conventional boundary point of 3.0 THz as
> being significant for the purpose of your question, then one would
> have to say that the 3,438 GHz measurements you refer to are *not*
> "radio frequency" measurements, but rather "far-infrared"
> measurements.
>
> --
> Dave Platt <dplatt@radagast.org> AE6EO
> Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
> I do _not_ wish to receive unsolicited commercial email, and I will
> boycott any company which has the gall to send me such ads!

I am curious here. At some point you have to switch from metallic conductors
and antennas to lenses and other optics. Any idea what the highest frequency
RF amplifier works at?

Tam

1047. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-30 23:41:15 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2007.08.30.23.43.22.520434@example.net>
Source record: 36815
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On Thu, 30 Aug 2007 14:52:12 -0700, Radium wrote:

> Hi:
>
> What is the highest radio frequency used for astronomy? Is it 3,438
> GHz?
>
> According to the link below, it is 3,438 GHz:
>
> http://books.nap.edu/openbook.php?record_id=11719&page=11
>
> Is 3,438 GHz the highest radio frequency used for astronomy?

No.

Hope This Helps!
Rich

1048. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 00:02:02 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <C2FCA88A.75752%dbowey@comcast.net>
Source record: 36816
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On 8/30/07 4:31 PM, in article -q2dnadn97rczkrbnZ2dnUVZ_ualnZ2d@comcast.com,
"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote:

>
> "Dave Platt" <dplatt@radagast.org> wrote in message
> news:3btjq4-cq6.ln1@radagast.org...
>>> What is the highest radio frequency used for astronomy? Is it 3,438
>>> GHz?
>>>
>>> According to the link below, it is 3,438 GHz:
>>>
>>> http://books.nap.edu/openbook.php?record_id=11719&page=11
>>>
>>> Is 3,438 GHz the highest radio frequency used for astronomy?
>>
>> That's very much a matter of convention. It all depends what you
>> choose to call "radio frequency" and what you choose to call something
>> else.
>>
>> As the article you cite points out, the measurements at 3438 GHz
>> (3.438 THz) blur the lines between microwave measurements (which many
>> would call "radio") and far-infrared measurements (which may would not
>> call "radio frequency").
>>
>> One source I see gives a frequency of 3.0 THz as the boundary between
>> "microwave" and "infrared". That boundary point is, I believe,
>> entirely one of human convention - there's no magical change in the
>> behavior of the signals as you cross from one side of this frequency
>> to the other.
>>
>> If you choose to treat the conventional boundary point of 3.0 THz as
>> being significant for the purpose of your question, then one would
>> have to say that the 3,438 GHz measurements you refer to are *not*
>> "radio frequency" measurements, but rather "far-infrared"
>> measurements.
>>
>> --
>> Dave Platt <dplatt@radagast.org> AE6EO
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>> I do _not_ wish to receive unsolicited commercial email, and I will
>> boycott any company which has the gall to send me such ads!
>
> I am curious here. At some point you have to switch from metallic conductors

> and antennas to lenses and other optics. Any idea what the highest frequency
> RF amplifier works at?
>
> Tam
>
>

It's all subject to state-of-the-art. 50 years ago 300 MHz. was complex to work with and 10 GHz. was considered way out there. Today 300 MHz is about as simple as DC and 10 GHz. is fairly straightforward to work with.

I imagine that in another 50 years or less, Integrated hybrid circuits for 3 THz. will be on the shelf items for experimenters to play with.

1049. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 00:13:34 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fb7mfe$kv0$1@news.jpl.nasa.gov>
Source record: 36820

Owen Duffy wrote:
> Jim Lux <james.p.lux@jpl.nasa.gov> wrote in
> news:fb6vim$h4m$1@news.jpl.nasa.gov:

>
> Whilst it might be reasonable to assume that the combined error in
> measurement of a high S/N sine wave voltage might be normally
> distributed, and that might also be true of measurement of noise voltage
> in some circumstances, I propose that measurement of noise power in
> narrow bandwidth with short integration times is distributed as Chi-
> squared and the number of samples becomes relevant in determining the
> number of degrees of freedom for the distribution. For this reason, I
> have talked about a confidence level rather than sigma (which is more
> applicable to normally distributed data).

I would agree..

My question would be whether the original measurement (before averaging)
is normally distributed. I suspect it is, being essentially integrated
noise.

1050. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 00:16:59 UTC
From: dplatt@radagast.org
Message-ID: <r83kq4-amj.ln1@radagast.org>
Source record: 36821
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

In article <-q2dnadn97rczkrbnZ2dnUVZ_ualnZ2d@comcast.com>,
Tam/WB2TT <t-tammaru@c0mca$t.net> wrote:

>I am curious here. At some point you have to switch from metallic conductors
>and antennas to lenses and other optics. Any idea what the highest frequency
>RF amplifier works at?

Dunno about an RF amplifier per se.

I do know that there have been some very interesting experiments with
nanotechnology, over the past couple of years, in which tiny carbon
nanotubes have been used as optical-frequency antennas.

http://www.nanowerk.com/spotlight/spotid=1442.php has a brief writeup
on one such.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
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1051. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 00:25:14 UTC
From: Sjouke Burry <burrynulnulfour@ppllaanneett.nnlll>
Message-ID: <46d75fea$0$25474$ba620dc5@text.nova.planet.nl>
Source record: 36817
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

```
Tam/WB2TT wrote:
> "Dave Platt" <dplatt@radagast.org> wrote in message
> news:3btjq4-cq6.ln1@radagast.org...
>>> What is the highest radio frequency used for astronomy? Is it 3,438
>>> GHz?
>>>
>>> According to the link below, it is 3,438 GHz:
>>>
>>> http://books.nap.edu/openbook.php?record_id=11719&page=11
>>>
>>> Is 3,438 GHz the highest radio frequency used for astronomy?
>> That's very much a matter of convention. It all depends what you
>> choose to call "radio frequency" and what you choose to call something
>> else.
>>
>> As the article you cite points out, the measurements at 3438 GHz
>> (3.438 THz) blur the lines between microwave measurements (which many
>> would call "radio") and far-infrared measurements (which may would not
>> call "radio frequency").
>>
>> One source I see gives a frequency of 3.0 THz as the boundary between
>> "microwave" and "infrared". That boundary point is, I believe,
>> entirely one of human convention - there's no magical change in the
>> behavior of the signals as you cross from one side of this frequency
>> to the other.
>>
>> If you choose to treat the conventional boundary point of 3.0 THz as
>> being significant for the purpose of your question, then one would
>> have to say that the 3,438 GHz measurements you refer to are *not*
>> "radio frequency" measurements, but rather "far-infrared"
>> measurements.
>>
>> --
>> Dave Platt <dplatt@radagast.org> AE6EO
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>> I do _not_ wish to receive unsolicited commercial email, and I will
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>
> I am curious here. At some point you have to switch from metallic conductors
> and antennas to lenses and other optics. Any idea what the highest frequency
> RF amplifier works at?
>
> Tam
```

>
>
I have even seen optics and electronics combined in an experimental
Road radar for car control from Philips, radar output was a very small
horn antenna connected to a wave guide, and in front of that they used a
plexyglass condensor lens to make a narrow beam, like you do with light.
Apparently those mm waves liked that plastic lens just fine.

1052. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 00:38:38 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <2qJBi.75732$jH3.71807@bignews6.bellsouth.net>
Source record: 36818

>
> WHAT DO I WIN?
>
> denny / k8do
>
> BTW, while this is done in the spirit of fun all answers are accurate
> as best I can make them based on my understanding of physics
>

Good answers! - you win my respect.
I saw a program on Public TV a while back, and they were trying to tie Macro and micro mechanics together with a String theory. There were several dimensions, and according to that program, It appears gravity waves might be the only common 'thread' between the several dimensions, and may hold the key to communications from one dimension to another.

Now I want THAT transceiver! A gravity-wave transceiver.
CQ, CQ, CQ 8th Dimension Dahdidi dit diDahdah dididididah didahdahdit dahdah didahdahdah
How can we modulate graviry waves > Then demodulate them and make sense of the result?

We need Radio shack for some answers. Yes sir, do you have a Gravity-Wave Walkie-Talkie?

1053. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 00:44:52 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1188521092.564864.3150@m37g2000prh.googlegroups.com>
Source record: 36819

On 30 Aug, 15:31, John Smith <assemblywiz...@gmail.com> wrote:
> art wrote:
>
> > ...
>
> > only the evidence that has been chosen for the moment at least until
> > the printer of science books get back to work again.
> > Ofcourse some say if it is in a book then that is what is correct,
> > just like on the web!
> > ...
> > Art
>
> Art:
>
> When we make this final leap, explain that one-more-thing which will
> trigger that flood of understanding, that revelation, that epiphany--we
> will only look back and marvel that it took us so long--that we were so
> close, for so long ...
>
> An example is the atomic bomb. We always knew that if you pile up a lot
> of pure radioactive material--you get heat--we speculated with a great
> belief that an explosion from this process was possible. But putting it
> all together, getting the right isotope with the extra atomic particles
> available and a system to SLAM! enough of the material together (~2.2Kg)
> and an "exploding bottle" of force to surround it and keep it together
> so it didn't just melt/vaporize/weak-poof but would burst out in a
> healthy explosion, until then, we hadn't really discovered the atomic
> bomb ...
>
> We stand such a threshold now, this "silence of new discovery" only
> leads before the "storm of revelation(s)", that very next step may take
> us there ... or, so I hope.
>
> Somewhere out there is the mind(s) which will accomplish it. We simply
> need to continue the discussion and search--keep the candle in the window.
>
> Simply put, we need an Einstein and a Manhattan Project.
>
> Or, perhaps we only just need a bunch more high IQ "kooks" in their
> basements with wires and reactances--thinking and building from their
> imaginations.
>
> Regards,
> JS

Yup..And after that person dies and only after he dies will people examine
what he found and depending on the favorable publicity of the time will
they consider its validity. To acknowledge its validity while the man is still alive
means acceptance that the man is the smartest of all a tribute that no man
is willing to assign.
For instance, if I stated that I had a dipole for 160 meters that was rotatable
only snarls and laughter would be heard since it is NOT something that one WANTS to believe,
because, if it was really possible he himself would have made it.
Art

1054. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 01:09:49 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb7ppbjae1@news.albasani.net>
Source record: 36822

Hal Rosser wrote:

> ...
> Now I want THAT transceiver! A gravity-wave transceiver.
> ...

If I remember correctly, Alexander Graham Bell was working on a device
to communicate with the dead, just before his end?

Regards,
JS

1055. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 01:23:27 UTC
From: dplatt@radagast.org
Message-ID: <f57kq4-13t.ln1@radagast.org>
Source record: 36825
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

In article <46d75fea$0$25474$ba620dc5@text.nova.planet.nl>,
Sjouke Burry <burrynulnulfour@ppllaanneett.nnlll> wrote:

>I have even seen optics and electronics combined in an experimental
>Road radar for car control from Philips, radar output was a very small
>horn antenna connected to a wave guide, and in front of that they used a
>plexyglass condensor lens to make a narrow beam, like you do with light.
>Apparently those mm waves liked that plastic lens just fine.

It's also possible to use photonic crystals and quasicrystals to
refract and band-process electromagnetic energy across a very wide
range of frequencies... all the way from radio, through microwave,
through far infrared, and into the optical spectrum.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
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boycott any company which has the gall to send me such ads!

1056. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 01:24:40 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb7ql6jae2@news.albasani.net>
Source record: 36823
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

Dave Platt wrote:

> ...
> I do know that there have been some very interesting experiments with
> nanotechnology, over the past couple of years, in which tiny carbon
> nanotubes have been used as optical-frequency antennas.
>
> http://www.nanowerk.com/spotlight/spotid=1442.php has a brief writeup
> on one such.
>

Let's hope, super cheap, super efficient solar panels would be great!
Bye, bye power company ...

Regards,
JS

1057. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 01:29:31 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1188523771.104258.299790@x40g2000prg.googlegroups.com>
Source record: 36824
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On Aug 30, 5:25 pm, Sjouke Burry <burrynulnulf...@ppllaanneett.nnlll>
wrote:
> Tam/WB2TT wrote:
> > "Dave Platt" <dpl...@radagast.org> wrote in message
> >news:3btjq4-cq6.ln1@radagast.org...
> >>> What is the highest radio frequency used for astronomy? Is it 3,438
> >>> GHz?
>
> >>> According to the link below, it is 3,438 GHz:
>
> >>>http://books.nap.edu/openbook.php?record_id=11719&page=11
>
> >>> Is 3,438 GHz the highest radio frequency used for astronomy?
> >> That's very much a matter of convention. It all depends what you
> >> choose to call "radio frequency" and what you choose to call something
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> >> As the article you cite points out, the measurements at 3438 GHz
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> >> "microwave" and "infrared". That boundary point is, I believe,
> >> entirely one of human convention - there's no magical change in the
> >> behavior of the signals as you cross from one side of this frequency
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> >> If you choose to treat the conventional boundary point of 3.0 THz as
> >> being significant for the purpose of your question, then one would
> >> have to say that the 3,438 GHz measurements you refer to are *not*
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>
> >> --
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> >> I do _not_ wish to receive unsolicited commercial email, and I will
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>
> > I am curious here. At some point you have to switch from metallic conductors
> > and antennas to lenses and other optics. Any idea what the highest frequency
> > RF amplifier works at?

>
> > Tam
>
> I have even seen optics and electronics combined in an experimental
> Road radar for car control from Philips, radar output was a very small
> horn antenna connected to a wave guide, and in front of that they used a
> plexyglass condensor lens to make a narrow beam, like you do with light.
> Apparently those mm waves liked that plastic lens just fine.

In fact, that would work fine at 10GHz, at 1GHz, and even at 1MHz, though the amount of material you'd have to use for the lens gets prohibitive at lower frequencies. It's all engineering tradeoffs. I know that "geodesic" lenses are used in some radar systems; the idea is that you have the signal travel a longer path (through a curved waveguide structure) in the center of the antenna/feed than it does toward the edges, just as in a convex lens the light in the center of the beam is slowed for a greater distance (and therefore retarded more) than the light at the outer edges.

I expect the boundary between "optics" and "electronics" will blur even more than it is already as both electronics and optical technologies continue to advance.

Cheers,
Tom

1058. (OT) : It's "Radium" And His Asking Questions - DOH !

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 02:10:44 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1188526244.495542.246860@q5g2000prf.googlegroups.com>
Source record: 36826
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

It's "Radium" And His Asking Questions - DOH !
- - - And Cross-Posting to Rec.Radio.Shortwave Again !
.
3,438 GHz - Wow Now That Is A Mighty Short Wave and
clearly beyond my Shortwave Radio's Ability - DOH Again !
http://en.wikipedia.org/wiki/Shortwave
http://en.wikipedia.org/wiki/Radio
.
Golly Gee . . . It's Astronomical ! ~ RHF
http://en.wikipedia.org/wiki/Astronomy
.
.
. .

1059. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 02:26:19 UTC
From: "Harold E. Johnson" <W4ZCB@mchsi.com>
Message-ID: <f%KBi.80966$Fc.58342@attbi_s21>
Source record: 36827
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

>> Apparently those mm waves liked that plastic lens just fine.
>
> In fact, that would work fine at 10GHz, at 1GHz, and even at 1MHz,
> though the amount of material you'd have to use for the lens gets
> prohibitive at lower frequencies. It's all engineering tradeoffs. I
> know that "geodesic" lenses are used in some radar systems; the idea
> is that you have the signal travel a longer path (through a curved
> waveguide structure) in the center of the antenna/feed than it does
> toward the edges, just as in a convex lens the light in the center of
> the beam is slowed for a greater distance (and therefore retarded
> more) than the light at the outer edges.
>
> I expect the boundary between "optics" and "electronics" will blur
> even more than it is already as both electronics and optical
> technologies continue to advance.
>
> Cheers,
> Tom

Hi Tom, we've used plastic lensing since at least the late 60's for focusing mundane 4-12 GHz radio waves. Dielectric refraction was used back then to extract additional gain from dish antennas by allowing more even illumination of the dish without illuminating the area around the dish. Harris radio had a patent on it.

W4ZCB
>

1060. Ferrite cores instead of a 1:1 current-choke UnUn for a Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 02:40:58 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.31.02.40.51.569253@from.qrz.com>
Source record: 36828

The Carolina Windom uses a coax feedline from a 4:1 balun at the feedpoint
to a 1:1 current-type unun at the 22-foot point.

Do you guys think that some number of snap-on ferrite chokes of the type
Radio Shack sells at

http://www.radioshack.com/product/index.jsp?productId=2103222&cp=&sr=1&origkw=ferrite&kw=f
errite&parentPage=search

(Radio Shack part number 273-105), wrapped around the RG-8X feedline at
the 22-foot point, will be suitable in place of something like the MFJ-915
"RF Line Isolator" (unun)?

If so, how many should I use? I have four of them now and the local Radio
Shack claims to have some more in stock.

Each of those ferrite cores is about 1.25" long by 1" square. I have no
idea what type or grade of ferrite material they're made out of.

Thanks...

1061. Re: Ferrite cores instead of a 1:1 current-choke UnUn for a Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 03:08:07 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <a30fd39paqat6kd8ubgq7vikhjm9n35tof@4ax.com>
Source record: 36829

On Thu, 30 Aug 2007 22:40:58 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>
>The Carolina Windom uses a coax feedline from a 4:1 balun at the feedpoint
>to a 1:1 current-type unun at the 22-foot point.
>
>Do you guys think that some number of snap-on ferrite chokes of the type
>Radio Shack sells at
>
>http://www.radioshack.com/product/index.jsp?productId=2103222&cp=&sr=1&origkw=ferrite&kw=ferrite&parentPage=search

Of undetermined parentage.

>(Radio Shack part number 273-105), wrapped around the RG-8X feedline at
>the 22-foot point, will be suitable in place of something like the MFJ-915
>"RF Line Isolator" (unun)?

Could be. (There is every possibility that the UnUn that comes with
the commercial unit is not suitable - in spite of testimonials to the
contrary.)

>If so, how many should I use? I have four of them now and the local Radio
>Shack claims to have some more in stock.

Put a short length of wire through it, use an antenna analyzer to
measure the Z. Now, divide that number into as much Z as is necessary
to isolate the end of the 22-foot feed point. That is how many you
will need.

>Each of those ferrite cores is about 1.25" long by 1" square. I have no
>idea what type or grade of ferrite material they're made out of.

The previous suggestion renders that moot.

The real question devolves to the parenthetic statement made earlier:
How much Z do you need? It should be 3 to 10 times the Z found at
that drive point. However, with a wild card of the extra radiator
found in the 22 foot drop, it is no longer a simple 4:1 relationship
found at the upper end.

So, we again enter into the exciting world of amateur discovery
through experimentation. Keep choking up until you get the
performance you desire - then stop choking up.

This, then, raises the next real question: What performance are you
expecting?

73's
Richard Clark, KB7QHC

1062. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 03:49:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <i52fd3llebgnt5p2b78r1sr8780v46773v@4ax.com>
Source record: 36830

On Thu, 30 Aug 2007 22:46:46 GMT, Owen Duffy <none@no.where> wrote:

>It is interesting in marketing hype that reference is made to 2 digit and
>3 digit instruments, which implies a log based metric (10*log
>(MaxReading)) when you assume a 'full count', and the same hype refers to
>the upper digit if it can only have values of 0 or 1 as half a digit,
>whereas it probably has a weight of log(0.5) or 0.3... so in utility
>terms, a 2 1/2 digit instrument is really a 2.3 digit instrument.

Hi Owen,

There are also 3000 count meters.

>In my case, I was making the measurements straddling 200mV, so I needed a
>bit of headroom for outliers, say 1dB or 225mV fsd, so it was effectively
>2.35 digit instrument if you followed that argument.

Certainly, but I abandoned multimeters to general utility long ago and
went straight to my own designs for known precision. The common sound
card will give you 65000 count readings; and there is a world of
higher ADCs up to at least 16 million count readings.

>Nevertheless, the error introduced by the resolution issue and instrument
>accuracy does not explain the experimental results... something else is
>happening, and one needs to look beyond the instrument itself to form a
>realistic view of measurement uncertainty when measuring narrowband
>noise.

You get non-monotonicity, quantization error, sample hold time errors,
codec error, issues of conversion errors through flash, successive
approximation, or single/dual-slope methods.

It would be simpler to handle the noise power in the linear domain,
and do the conversion to digital late in the chain (if at all).
Getting out into the hundredths of dB resolution (outside of the
standard 1KHz product lines) drives you into building your own
solution.

Linear circuits in the AF arena have long managed 6, 7 and sometimes 8
place resolution. You might have to twist as many knobs to get the
reading, but you also control the variables. Bolometery solves a lot
of complexities (but that is where this topic started - after a
fashion; and in that regard, optical pyrometry might be summoned up).

73's
Richard Clark, KB7QHC

1063. Re: Ferrite cores instead of a 1:1 current-choke UnUn for a Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 06:00:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb8aqf$dn1$1@news.albasani.net>
Source record: 36831

Richard Clark wrote:

> ...
> This, then, raises the next real question: What performance are you
> expecting?
>
> 73's
> Richard Clark, KB7QHC

Well, I'd kinda like my ford explorer xlt 4WD with a 4.0L engine to perform line a maserati, any chance? Any tweaks you could possible suggest? Possibly new paint? :-)

Regards,
JS

1064. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 06:33:20 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns999CEFA0152BFdoldridgsprintca@64.59.135.159>
Source record: 36832

K7ITM <k7itm@msn.com> wrote in
news:1188434294.750903.155630@50g2000hsm.googlegroups.com:

> On Aug 29, 4:11 pm, "Mike Kaliski" <michael.kali...@tesco.net> wrote:
>> "John Smith" <assemblywiz...@gmail.com> wrote in message
>>
>> news:fb4is3bln1@registered.motzarella.org...
>>
>>
>>
>> > Ok. You might ask me, "Why do you laugh at people discussing
>> > antennas emitting photons?
>>
>> > And, I would answer:
>>
>> > Photon emissions from an antenna element(s) seems difficult, at
>> > best, to visualize (no pun intended.)
>>
>> > Consider a 1/2 inch dia. single element antenna (monopole?) If the
>> > thing is emitting photons, one would think the photons are being
>> > emitted equally around the elements circumference.
>>
>> > Well, now flatten that 1/2 dia rod into a very thin
>> > ribbon--however, the ribbon still has the same area of cross
>> > section, and equal to the cross section of the round rod. If this
>> > conductor is emitting photons, one would expect them, now, to be
>> > off the two flat sides of the element and relative few off the
>> > sides--indeed, one would now expect this element to be becoming
>> > directional in two favored directions--off the flat sides ...
>> > to date, I have NOT been able to measure an acceptable difference
>> > to reinforce the "illumination properties" of the element.
>>
>> > The photon/wave properties of rf still remains a mystery ... and
>> > proof hard to come by.
>>
>> > Regards,
>> > JS
>>
>> John
>>
>> Imagine your ribbon antena flattened to the thickness of a razor
>> blade. Instead of using RF, heat the antenna with a blow torch until
>> it becomes white hot.
>>

>> It is only when looking at the exact edge of the antenna that any
>> appreciable drop in light out put will be noticed. At all broadside
>> angles an appreciable amount of light would be seen. The same effects
>> can be expected to occur at RF but the majority of amateur test
>> equipment would not have the resolution to measure the dip with the
>> antenna edge on. The width of the receiving antenna and diffraction
>> effects would tend to hide this in the far field, and alignment,
>> reflection effects and manufacturing tolerances in the near field.
>
> Or perhaps more appropriately, with visible light being around 500
> nanometers wavelength, imagine your antenna wire being about 0.01
> nanometers thick and 1 nanometer wide (and 250 nanometers long, if you
> wish) ... Now does you intuition tell you anything useful about the
> angular distribution of emitted photons? I suppose not.

The real reason that photons are not a particularly useful concept in RF
design is that they are vanishingly small in energy, due to the rather
long wavelenths. I doubt if there is any equipment that would actually
intercept a MEASURABLE photon at most radio frequencies. You cannot
always say that of short-wavelength gamma rays or even light.

--
Dave Oldridge+
ICQ 1800667

1065. Repairing A Broken Trap?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 06:48:58 UTC
From: Clayton <Evans8119@aol.com>
Message-ID: <1188542938.520434.182820@q4g2000prc.googlegroups.com>
Source record: 36833

Hi,
I am needing to repair a trap on my beam antenna...while cleaning the corrosion off the windings inside,the last inch or so broke off and I am unable to reattach it.
It is approximately 10 gauge Aluminum wire and as luck would have it I cant find a place around here that sells any. I don't want to buy online as I only need about 2 foot or so.

Any ideas as to what I should do to remedy the problem?

Any help would be greatly Appreciated
Thank You

1066. Vertical antenna problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 06:56:34 UTC
From: neno <nenadBEZSPAMA@elektro-celik.hr>
Message-ID: <fb8e32$qo1$1@ss408.t-com.hr>
Source record: 36684

Hello,
I build lambda/4 vertical for 20m (i used the fishing pole).
The vertical and radials are build from insulated wire 2.5 square millimeters.
I have used formula on internet and Eznec so I cut 5,09meters wire for vertical and 4 pieces 5.25m wire for radials (i left radials longer so I can cut them to make fine tuning of antenna).
I wanted minimal SWR on 14.050MHz.
But now I have minimal SWR on 12.800 MHz . :-)
According to Eznec if I short the radials for 2meters (so they will be long 3.25m) that will rise resonant frequency around 1.2MHz.
But it is not logic to me. So short radials?
Also according to Eznec if I short vertical to 4.7meters and radials to 4.7meters that will also rise resonant frequency arround 1.2MHz.
Could that be that my mistake is that I didn't calculate the velocity factor for wire.
Maybe i should calculate it because I used single wire instead of aluminum tube.
Or maybe some surrounding objects are influencing. I have metal mast for loop antenna 5meters from vertical.
It is easier to cut radials (because I don't have to take down the whole antenna).
What do You suggest?
To cut only radials to 3.25m or vertical and radials to 4.7m?
What is better?
Just to mentioned that I tuned antenna with tuner and it works great for DXing.
73 9A4MN Neno

1067. Re: How to make a Stationmaster for hf ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 10:40:19 UTC
From: Wimpie <wimtel@tetech.nl>
Message-ID: <1188556819.963040.163310@i38g2000prf.googlegroups.com>
Source record: 36685

On 30 ago, 02:53, VK3XL <VK3XL.11bf...@radiobanter.com> wrote:
> Wimpie;590418 Wrote:
>
>
>[removed]
> My intention is to use this antenna on the 10 meter FM section of the
> band. I have been given a 1/2 wave "Ringo" antenna that is missing the
> ring. I intend to convert it to the "stationmaster" type antenna as I
> think it will be easier to get the matching system right using a coil
> spaced from the bottom of the radiator than try to make a new matching
> ring etc. Thus if I could locate plans for the making of such an
> antenna it would save me a fair amount of time in the calculations and
> cut and try type of antenna building.
>
> The info collected so far is at least a starting point for the
> conversion of this antenna.
>
> Thanks to all who have given input, it is greatly appreciated.
>
> Mike
> VK3XL
>
> --
> VK3XL

Hello Mike,

In your case, I would try to rebuild the ringo. The construction is not that difficult and the capacitance between the radiator and support is designed to provide the right capacitance for doing the matching. To get your whip to resonate as a half wave, you need that capacitance for making the step from 50 Ohms to about 1500 Ohms (also when using the series coil solution). Instead of aluminum strip, you can use heavy copper wire.

The ringo gives you the freedom to change the inductance (smaller/shorter ringo) and the tap. Because of the DC short it gives some protection against the high energetic LF components in nearby lightning strikes. Disadvantage is the somewhat less useful bandwidth.

http://www.ea8zq.com/ant27.htm gives some info, the text is Spanish, but the images are nice.

http://www.elettronia.it/Catalogo-d.asp?cod=A052 shows a picture of a ringo antenna (Italian site). The ringo has about 2 turns.

Somebody living close to me had also a ringo antenna (with about 2 turns). The antenna could be tuned at the antenna base by extending a tube downwards. I'm sorry I don't have picture.

Best regards,

Wim
PA3DJS
www.tetech.nl

1068. Re: Vertical antenna problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 11:16:10 UTC
From: neno <nenadBEZSPAMA@elektro-celik.hr>
Message-ID: <fb8t9s$5ia$1@ss408.t-com.hr>
Source record: 36686

Well it seem that Google has the answer.
I found that lot of people are talking about influence of wire insulation on velocity factor.
I didn't know that this influence is so big.
I think that the best solution is to cut radial and vertical to length 4.7m.
73 9A4MN Neno

"neno" <nenadBEZSPAMA@elektro-celik.hr> wrote in message news:fb8e32$qo1$1@ss408.t-com.hr...
> Hello,
> I build lambda/4 vertical for 20m (i used the fishing pole).
> The vertical and radials are build from insulated wire 2.5 square
> millimeters.
> I have used formula on internet and Eznec so I cut 5,09meters wire for
> vertical and 4 pieces 5.25m wire for radials (i left radials longer so I
> can cut them to make fine tuning of antenna).
> I wanted minimal SWR on 14.050MHz.
> But now I have minimal SWR on 12.800 MHz . :-)
> According to Eznec if I short the radials for 2meters (so they will be
> long 3.25m) that will rise resonant frequency around 1.2MHz.
> But it is not logic to me. So short radials?
> Also according to Eznec if I short vertical to 4.7meters and radials to
> 4.7meters that will also rise resonant frequency arround 1.2MHz.
> Could that be that my mistake is that I didn't calculate the velocity
> factor for wire.
> Maybe i should calculate it because I used single wire instead of aluminum
> tube.
> Or maybe some surrounding objects are influencing. I have metal mast for
> loop antenna 5meters from vertical.
> It is easier to cut radials (because I don't have to take down the whole
> antenna).
> What do You suggest?
> To cut only radials to 3.25m or vertical and radials to 4.7m?
> What is better?
> Just to mentioned that I tuned antenna with tuner and it works great for
> DXing.
> 73 9A4MN Neno
>

1069. Re: Vertical antenna problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 13:55:00 UTC
From: Wimpie <wimtel@tetech.nl>
Message-ID: <1188568500.659751.212900@y42g2000hsy.googlegroups.com>
Source record: 36687

On 31 ago, 08:56, "neno" <nenadBEZSP...@elektro-celik.hr> wrote:
> Hello,
> I build lambda/4 vertical for 20m (i used the fishing pole).
> The vertical and radials are build from insulated wire 2.5 square
> millimeters.
> I have used formula on internet and Eznec so I cut 5,09meters wire for
> vertical and 4 pieces 5.25m wire for radials (i left radials longer so I can
> cut them to make fine tuning of antenna).
> I wanted minimal SWR on 14.050MHz.
> But now I have minimal SWR on 12.800 MHz . :-)
> According to Eznec if I short the radials for 2meters (so they will be long
> 3.25m) that will rise resonant frequency around 1.2MHz.
> But it is not logic to me. So short radials?
> Also according to Eznec if I short vertical to 4.7meters and radials to
> 4.7meters that will also rise resonant frequency arround 1.2MHz.
> Could that be that my mistake is that I didn't calculate the velocity factor
> for wire.
> Maybe i should calculate it because I used single wire instead of aluminum
> tube.
> Or maybe some surrounding objects are influencing. I have metal mast for
> loop antenna 5meters from vertical.
> It is easier to cut radials (because I don't have to take down the whole
> antenna).
> What do You suggest?
> To cut only radials to 3.25m or vertical and radials to 4.7m?
> What is better?
> Just to mentioned that I tuned antenna with tuner and it works great for
> DXing.
> 73 9A4MN Neno

Hello Neno,

Influence of PVC wire insulation on wave propagation is just a few
percent. Most of the field lines go through air. I did a calculation
myself (however results are in Dutch language). When the wire is
thicker, the influence of same layer of insulation becomes less.

The soil has significant influence on resonant frequency and steepness
of resonance of the radials. When you use many of them the length
becomes less critical. You can also use elevated radials (for example
about 4 radials 1..2 m above ground).

However when VSWR is OK with short radiator or shorter radials and you
don't have common mode problems in the coaxial feed line, I would not
worry.

When you are still curious, you might model the nearby structures in your NEC file and try to simulate the influence. A mast at 5m distance is within the near field, so you may expect some coupling.

Instead of cutting, you can also roll them up (beginning at the end), so you can re-extend them when required).

Best regards,

Wim
PA3DJS
www.tetech.nl

1070. Re: Repairing A Broken Trap?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 14:45:12 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <YPVBi.2$h06.0@trnddc03>
Source record: 36688

"Clayton" <Evans8119@aol.com> wrote in message
news:1188542938.520434.182820@q4g2000prc.googlegroups.com...
> Hi,
> I am needing to repair a trap on my beam antenna...while cleaning the
> corrosion off the windings inside,the last inch or so broke off and I
> am unable to reattach it.
> It is approximately 10 gauge Aluminum wire and as luck would have it I
> cant find a place around here that sells any. I don't want to buy
> online as I only need about 2 foot or so.
>
> Any ideas as to what I should do to remedy the problem?
>
> Any help would be greatly Appreciated
> Thank You

Hi Clayton

Would you consider visiting a welding store? There are lots of aluminum
welding wires (consumables) available.

Jerry

1071. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 14:56:20 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1188572180.557197.36020@o80g2000hse.googlegroups.com>
Source record: 36689

On 30 Aug, 23:33, Dave Oldridge <doldr...@leavethisoutshaw.ca> wrote:
snip

>
> The real reason that photons are not a particularly useful concept in RF
> design is that they are vanishingly small in energy, due to the rather
> long wavelenths. I doubt if there is any equipment that would actually
> intercept a MEASURABLE photon at most radio frequencies. You cannot
> always say that of short-wavelength gamma rays or even light.
>
> --
> Dave Oldridge+
> ICQ 1800667- Hide quoted text -
>
> - Show quoted text -

It seams that many here have aligned themselvezs with modern
relativistic
theories expoused by scientists and lately championed by Einstein.
Yet to do this pushes aside great scientists of the past such as
Newton,
Ohm and many others with phoney thinking. The next decade will push
aside
this ludicrous thinking and move back to Newtonian thinking where
"equilibrium"
was always at center stage. Gravitation is at the center of all
science and to
build on anything else is to place a foundation on sand. Particulates
DO have mass
which thus places it firmly into Newtons Laws of physics areana which
has never been disproved.
Regards
Art

1072. Re: Ferrite cores instead of a 1:1 current-choke UnUn for a Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 15:13:41 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.31.15.13.39.969578@from.qrz.com>
Source record: 36690

On Thu, 30 Aug 2007 20:08:07 -0700, Richard Clark wrote:

> This, then, raises the next real question: What performance are you
> expecting?

Good morning, Richard.

I would like it to work well. :-)

OK, more specifically, I'd like it to show a decent match (that is, a match that's close enough for my TS-940S internal tuner to handle) on 80, 40, and 20, and work at least as well as my 160-meter inverted V that I feed with ladder line and a manual tuner.

I have no way to define "expected performance" any way other than that.

Of course that leaves all kinds of unanswered questions regarding exactly what I mean by "at least as well"... regional / NVIS? (Carolina Windom may not work as well as the V) ... DX? (Carolina Windom may work better than the V at least on 20) ... etc.

I also have no antenna analyzer and no means to acquire one any time soon... best I can do is my transmitter (cranked way back in power) and an SWR meter. No doubt 3/4 or more of my questions on this forum over the last several weeks would have been answered by an antenna analyzer but that's a luxury that's not currently available.

You mention the "UnUn that comes with the commercial unit"... not sure if you meant a commercially-available CW antenna, but this one is being built from scratch using a W2AU-type 4:1 balun and some lengths of insulated copper-clad steel wire I have here.

1073. Convertible 40M vertical to 20M vert dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 15:13:56 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1188573236.141348.44340@r29g2000hsg.googlegroups.com>
Source record: 36691

I am postulating a full-height quarter-wave 40M vertical that is switchable (relays halfway up?) to a 20M vertical dipole.

Seeing as how my two favorite bands are 40M and 20M, seems to make sense to me, but googling to see if anyone else has done this sort of thing in the past doesn't give me a lot of hits. Is this workable? I am not yet ready to go (budgetwise or real-estate-wise) to a real 20M beam and I'd like to increase my oomph for DXing on 40M (right now I have a wire dipole in the trees and am having a blast).

Looks to me I could build an extremely lightweight small 5M high tower with a 5M metal mast on top. (I know, real conductor diameter will mess those numbers up a little bit). And a relay between the mast and the tower would either put them in series for feed as a quarter-wave 40M vertical, or separate the two and let me feed halfway up as a 20M vertical dipole.

How would the ground radials used on 40M potentially mess up the use as a 20M vertical dipole?

One idea for a lightweight 40M full-height tower/mast vertical with insulated-from-ground mounting is shown at http://svc.cc/antena.html

Tim N3QE

1074. Re: Vertical antenna problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 15:30:55 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <07ednYfOOMuwqUXbnZ2dnUVZ_qiinZ2d@comcast.com>
Source record: 36692

"neno" <nenadBEZSPAMA@elektro-celik.hr> wrote in message
news:fb8e32$qo1$1@ss408.t-com.hr...
> Hello,
> I build lambda/4 vertical for 20m (i used the fishing pole).
> The vertical and radials are build from insulated wire 2.5 square
> millimeters.
> I have used formula on internet and Eznec so I cut 5,09meters wire for
> vertical and 4 pieces 5.25m wire for radials (i left radials longer so I
> can cut them to make fine tuning of antenna).
> I wanted minimal SWR on 14.050MHz.
> But now I have minimal SWR on 12.800 MHz . :-)
> According to Eznec if I short the radials for 2meters (so they will be
> long 3.25m) that will rise resonant frequency around 1.2MHz.
> But it is not logic to me. So short radials?
> Also according to Eznec if I short vertical to 4.7meters and radials to
> 4.7meters that will also rise resonant frequency arround 1.2MHz.
> Could that be that my mistake is that I didn't calculate the velocity
> factor for wire.
> Maybe i should calculate it because I used single wire instead of aluminum
> tube.
> Or maybe some surrounding objects are influencing. I have metal mast for
> loop antenna 5meters from vertical.
> It is easier to cut radials (because I don't have to take down the whole
> antenna).
> What do You suggest?
> To cut only radials to 3.25m or vertical and radials to 4.7m?
> What is better?
> Just to mentioned that I tuned antenna with tuner and it works great for
> DXing.
> 73 9A4MN Neno
>
What is the SWR at 14.05? Assuming a good ground, at resonance the SWR will
be 1.5:1for 50 Ohm coax; 2:1 for 75 Ohm.

Tam/WB2TT

1075. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 15:34:09 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <RxWBi.51454$YL5.7458@newssvr29.news.prodigy.net>
Source record: 36694

John Smith wrote:
> Somewhere out there is the mind(s) which will accomplish it.

Whoever developed the technique of correctly
"guessing" the state of quantum Qubit particles
without collapsing their probability functions
gets a tip of the hat from me.
--
73, Cecil http://www.w5dxp.com

1076. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 15:34:14 UTC
From: John Todd <jtodd@island.net>
Message-ID: <MPG.2141d4ce252a2f73989680@news.uniserve.com>
Source record: 36693
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

In article <1188510732.103951.83430@q5g2000prf.googlegroups.com>,
glucegen1@gmail.com says...
> Hi:
>
> What is the highest radio frequency used for astronomy? Is it 3,438
> GHz?
>
> According to the link below, it is 3,438 GHz:
>
> http://books.nap.edu/openbook.php?record_id=11719&page=11
>
> Is 3,438 GHz the highest radio frequency used for astronomy?
>
>
> Thanks,
>
> Radium
>
>

Actually, it says 3 THz.
3.4GHz is C band, like satellite TV. Ku band sat TV is 12GHz.
There are many off-the-shelf radio instruments available well above this.

1077. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 15:40:14 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <vDWBi.957$ZA5.802@nlpi068.nbdc.sbc.com>
Source record: 36695

Hal Rosser wrote:
> How can we modulate graviry waves

Modulating a gravity wave would probably distort the
space-time occupied by the operator. Maybe best to
limit operation to QRP levels.
--
73, Cecil http://www.w5dxp.com

1078. Re: Ferrite cores instead of a 1:1 current-choke UnUn for a Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 15:54:30 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <WQWBi.51455$YL5.4121@newssvr29.news.prodigy.net>
Source record: 36699

Rick (W-A-one-R-K-T) wrote:
> If so, how many should I use? I have four of them now and the local Radio
> Shack claims to have some more in stock.

You are trying to create a w2du current-choke-balun. Use the RS
devices along with some #77 or #43 ferrite beads from Amidon.
(Known characteristics for less than $5 seems to me to be
superior to unknown characteristics for more than $5.)

http://www.amidoncorp.com/aai_ferritesforrfi.htm
--
73, Cecil http://www.w5dxp.com

1079. Re: Repairing A Broken Trap?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 16:01:16 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <gXWBi.109802$fJ5.15698@pd7urf1no>
Source record: 36696

Clayton wrote:
> Hi,
> I am needing to repair a trap on my beam antenna...while cleaning the
> corrosion off the windings inside,the last inch or so broke off and I
> am unable to reattach it.
> It is approximately 10 gauge Aluminum wire and as luck would have it I
> cant find a place around here that sells any. I don't want to buy
> online as I only need about 2 foot or so.
>
> Any ideas as to what I should do to remedy the problem?
>
> Any help would be greatly Appreciated
> Thank You
>
Replace it with copper. You won't know the difference.

Irv VE6BP

1080. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 16:01:38 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1188576098.027770.226680@19g2000hsx.googlegroups.com>
Source record: 36697

On Aug 30, 11:33 pm, Dave Oldridge <doldr...@leavethisoutshaw.ca>
wrote:
> K7ITM <k7...@msn.com> wrote innews:1188434294.750903.155630@50g2000hsm.googlegroups.com:
>
>
>
> > On Aug 29, 4:11 pm, "Mike Kaliski" <michael.kali...@tesco.net> wrote:
> >> "John Smith" <assemblywiz...@gmail.com> wrote in message
>
> >>news:fb4is3bln1@registered.motzarella.org...
>
> >> > Ok. You might ask me, "Why do you laugh at people discussing
> >> > antennas emitting photons?
>
> >> > And, I would answer:
>
> >> > Photon emissions from an antenna element(s) seems difficult, at
> >> > best, to visualize (no pun intended.)
>
> >> > Consider a 1/2 inch dia. single element antenna (monopole?) If the
> >> > thing is emitting photons, one would think the photons are being
> >> > emitted equally around the elements circumference.
>
> >> > Well, now flatten that 1/2 dia rod into a very thin
> >> > ribbon--however, the ribbon still has the same area of cross
> >> > section, and equal to the cross section of the round rod. If this
> >> > conductor is emitting photons, one would expect them, now, to be
> >> > off the two flat sides of the element and relative few off the
> >> > sides--indeed, one would now expect this element to be becoming
> >> > directional in two favored directions--off the flat sides ...
> >> > to date, I have NOT been able to measure an acceptable difference
> >> > to reinforce the "illumination properties" of the element.
>
> >> > The photon/wave properties of rf still remains a mystery ... and
> >> > proof hard to come by.
>
> >> > Regards,
> >> > JS
>
> >> John
>
> >> Imagine your ribbon antena flattened to the thickness of a razor
> >> blade. Instead of using RF, heat the antenna with a blow torch until
> >> it becomes white hot.

>
> >> It is only when looking at the exact edge of the antenna that any
> >> appreciable drop in light out put will be noticed. At all broadside
> >> angles an appreciable amount of light would be seen. The same effects
> >> can be expected to occur at RF but the majority of amateur test
> >> equipment would not have the resolution to measure the dip with the
> >> antenna edge on. The width of the receiving antenna and diffraction
> >> effects would tend to hide this in the far field, and alignment,
> >> reflection effects and manufacturing tolerances in the near field.
>
> > Or perhaps more appropriately, with visible light being around 500
> > nanometers wavelength, imagine your antenna wire being about 0.01
> > nanometers thick and 1 nanometer wide (and 250 nanometers long, if you
> > wish) ... Now does you intuition tell you anything useful about the
> > angular distribution of emitted photons? I suppose not.
>
> The real reason that photons are not a particularly useful concept in RF
> design is that they are vanishingly small in energy, due to the rather
> long wavelenths. I doubt if there is any equipment that would actually
> intercept a MEASURABLE photon at most radio frequencies. You cannot
> always say that of short-wavelength gamma rays or even light.
>
> --
> Dave Oldridge+
> ICQ 1800667

Yes, exactly. As I pointed out in another posting in this thread, for
14MHz electromagnetic radiation, it takes about 1e6 quanta per second
to equal the noise power in a one Hz bandwidth in a resistor at room
temperature. I suppose it could be open to discussion exactly _what_
the low energy per quantum is due to. That might be more interesting
than a lot else that's gone on in this thread, so far.

1081. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 16:06:15 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1188576375.979457.49190@22g2000hsm.googlegroups.com>
Source record: 36698
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On Aug 30, 7:26 pm, "Harold E. Johnson" <W4...@mchsi.com> wrote:
> >> Apparently those mm waves liked that plastic lens just fine.
>
> > In fact, that would work fine at 10GHz, at 1GHz, and even at 1MHz,
> > though the amount of material you'd have to use for the lens gets
> > prohibitive at lower frequencies. It's all engineering tradeoffs. I
> > know that "geodesic" lenses are used in some radar systems; the idea
> > is that you have the signal travel a longer path (through a curved
> > waveguide structure) in the center of the antenna/feed than it does
> > toward the edges, just as in a convex lens the light in the center of
> > the beam is slowed for a greater distance (and therefore retarded
> > more) than the light at the outer edges.
>
> > I expect the boundary between "optics" and "electronics" will blur
> > even more than it is already as both electronics and optical
> > technologies continue to advance.
>
> > Cheers,
> > Tom
>
> Hi Tom, we've used plastic lensing since at least the late 60's for focusing
> mundane 4-12 GHz radio waves. Dielectric refraction was used back then to
> extract additional gain from dish antennas by allowing more even
> illumination of the dish without illuminating the area around the dish.
> Harris radio had a patent on it.
>
> W4ZCB
>
>

Hi Harold,

Yep. The radar stuff I wrote about is from that era. I wouldn't be
at all surprised to see mention of it from well before that; certainly
we knew about the effect that makes dielectric lens action possible
for RF (which is after all just a continuation of the spectrum that
includes visible light) since before we knew how to generate
appreciable energy at microwave frequencies.

Cheers,
Tom

1082. Re: Vertical antenna problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 16:15:36 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <F8XBi.747$4J3.541@newssvr22.news.prodigy.net>
Source record: 36700

neno wrote:
> What do You suggest?
> To cut only radials to 3.25m or vertical and radials to 4.7m?
> What is better?

Or (3) you could leave the radials as they are
and shorten the vertical wire.

The physical environment will shift the
resonant frequency away from that predicted
by EZNEC as modeling is not an exact science.

Any of the three choices will work and none of
them will result in the exact resonant frequency
you desire. In the end, to get the frequency
exact, you will be required to "cut and try" in
an iterative process that often forces you to
add back one inch of the two inches you just
removed. :-)
--
73, Cecil http://www.w5dxp.com

1083. Re: Ferrite cores instead of a 1:1 current-choke UnUn for a Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 16:22:40 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <kfXBi.51456$YL5.9943@newssvr29.news.prodigy.net>
Source record: 36701

Rick (W-A-one-R-K-T) wrote:
> I also have no antenna analyzer and no means to acquire one any time
> soon... best I can do is my transmitter (cranked way back in power) and an
> SWR meter.

What you are trying to do is minimize common-mode currents
between the choke and the transmitter. On the eznec.com
web page, Roy describes an inexpensive method of detecting
common-mode current amplitude using a simple toroidal pickup
coil. You could actually measure the relative effect of
your RS RFI devices.
--
73, Cecil http://www.w5dxp.com

1084. Radium Free "Radio Rebelde" on 11,655 kHz @ 16:57 UTC

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 17:35:23 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1188581723.675510.94070@x35g2000prf.googlegroups.com>
Source record: 36702
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On Aug 31, 8:34 am, John Todd <jt...@island.net> wrote:
> In article <1188510732.103951.83...@q5g2000prf.googlegroups.com>,
> gluceg...@gmail.com says...
>
>
>
>
>
>
> > Hi:
>
> > What is the highest radio frequency used for astronomy? Is it 3,438
> > GHz?
>
> > According to the link below, it is 3,438 GHz:
>
> >http://books.nap.edu/openbook.php?record_id=11719&page=11
>
> > Is 3,438 GHz the highest radio frequency used for astronomy?
>
> > Thanks,
>
- - Radium
-
- Actually, it says 3 THz.
- 3.4GHz is C band, like satellite TV. Ku band sat TV is 12GHz.
- There are many off-the-shelf radio instruments
- available well above this.

HELLO - 3,438 GHz or 3.438 THz It Don't Matter.
- - It Ain't Shortwave {High Frequency} Radio - -
.
Please remove Rec.Radio.Shortwave from "Radium's
3,483 GHz Radio Astronomy Posting and Your Replies.
.
Listening to Radio Rebelde right now on 11,655 kHz
{Thats in the 25m Shortwave Band} @ 16:57 UTC
http://www.radiorebelde.com.cu/programacion.htm
Horarios y Frecuencias de Trasmisión de Radio Rebelde
.
Listening to the Beautiful Sounds of Latin Music
and yes it sounds Astronomical to my Ears !
.
Radio Rebelde - Habana Cuba - al Ritmo de la Vida

http://www.radiorebelde.com.cu/
TOH News in Spanish @ 17:00 UTC
.
Redsun RP2100 'portable' AM/FM Shortwave Radio
http://www.radiointel.com/review-redsunrp2100.htm
just using the Whip Antenna S2~S3 with Fair Audio.
.
17:30 UTC out ~ RHF - Twain Harte, CA -USA-
.
.
. .

1085. Re: Convertible 40M vertical to 20M vert dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 17:49:08 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <owYBi.22136$eY.18647@newssvr13.news.prodigy.net>
Source record: 36703

Tim Shoppa wrote:
> I am postulating a full-height quarter-wave 40M vertical that is
> switchable (relays halfway up?) to a 20M vertical dipole.

You could use a trap instead of a relay.

Another approach would be to chose a fixed vertical height
to give you a manageable feedpoint impedance on both bands.
For instance, a 25 foot vertical requires an easy to implement
base network on each band. EZNEC says the feedpoint impedances
are 17-j130 on 40m and 200+j320 on 20m, both easily matched
using common network components (or an autotuner).

> How would the ground radials used on 40M potentially mess up the use
> as a 20M vertical dipole?

Ground proximity detunes the radials so length is only of
minor importance. 40m ground radials work fine on 20m.
--
73, Cecil http://www.w5dxp.com

1086. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 18:00:10 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1188583210.459670.288220@r34g2000hsd.googlegroups.com>
Source record: 36704

On 31 Aug, 09:01, K7ITM <k7...@msn.com> wrote:
> On Aug 30, 11:33 pm, Dave Oldridge <doldr...@leavethisoutshaw.ca>
> wrote:
>
>
>
>
>
> > K7ITM <k7...@msn.com> wrote
innews:1188434294.750903.155630@50g2000hsm.googlegroups.com:
>
> > > On Aug 29, 4:11 pm, "Mike Kaliski" <michael.kali...@tesco.net> wrote:
> > >> "John Smith" <assemblywiz...@gmail.com> wrote in message
>
> > >>news:fb4is3bln1@registered.motzarella.org...
>
> > >> > Ok. You might ask me, "Why do you laugh at people discussing
> > >> > antennas emitting photons?
>
> > >> > And, I would answer:
>
> > >> > Photon emissions from an antenna element(s) seems difficult, at
> > >> > best, to visualize (no pun intended.)
>
> > >> > Consider a 1/2 inch dia. single element antenna (monopole?) If the
> > >> > thing is emitting photons, one would think the photons are being
> > >> > emitted equally around the elements circumference.
>
> > >> > Well, now flatten that 1/2 dia rod into a very thin
> > >> > ribbon--however, the ribbon still has the same area of cross
> > >> > section, and equal to the cross section of the round rod. If this
> > >> > conductor is emitting photons, one would expect them, now, to be
> > >> > off the two flat sides of the element and relative few off the
> > >> > sides--indeed, one would now expect this element to be becoming
> > >> > directional in two favored directions--off the flat sides ...
> > >> > to date, I have NOT been able to measure an acceptable difference
> > >> > to reinforce the "illumination properties" of the element.
>
> > >> > The photon/wave properties of rf still remains a mystery ... and
> > >> > proof hard to come by.
>
> > >> > Regards,
> > >> > JS
>

> > >> John
>
> > >> Imagine your ribbon antena flattened to the thickness of a razor
> > >> blade. Instead of using RF, heat the antenna with a blow torch until
> > >> it becomes white hot.
>
> > >> It is only when looking at the exact edge of the antenna that any
> > >> appreciable drop in light out put will be noticed. At all broadside
> > >> angles an appreciable amount of light would be seen. The same effects
> > >> can be expected to occur at RF but the majority of amateur test
> > >> equipment would not have the resolution to measure the dip with the
> > >> antenna edge on. The width of the receiving antenna and diffraction
> > >> effects would tend to hide this in the far field, and alignment,
> > >> reflection effects and manufacturing tolerances in the near field.
>
> > > Or perhaps more appropriately, with visible light being around 500
> > > nanometers wavelength, imagine your antenna wire being about 0.01
> > > nanometers thick and 1 nanometer wide (and 250 nanometers long, if you
> > > wish) ... Now does you intuition tell you anything useful about the
> > > angular distribution of emitted photons? I suppose not.
>
> > The real reason that photons are not a particularly useful concept in RF
> > design is that they are vanishingly small in energy, due to the rather
> > long wavelenths. I doubt if there is any equipment that would actually
> > intercept a MEASURABLE photon at most radio frequencies. You cannot
> > always say that of short-wavelength gamma rays or even light.
>
> > --
> > Dave Oldridge+
> > ICQ 1800667
>
> Yes, exactly. As I pointed out in another posting in this thread, for
> 14MHz electromagnetic radiation, it takes about 1e6 quanta per second
> to equal the noise power in a one Hz bandwidth in a resistor at room
> temperature. I suppose it could be open to discussion exactly _what_
> the low energy per quantum is due to. That might be more interesting
> than a lot else that's gone on in this thread, so far.- Hide quoted text -
>
> - Show quoted text -

Oh I don't know about that. I find some of the comments quite
interesting
since it shows that there are some interested thinkers out there who
are interested in relativistic
versus particulate theorems and its connection to electro magnetic
waves.
The thread has certainly attracted a lot of attention from hams
interested in the mystery
of communication transmission beyond the glib and unverifiable
statements made by some .

Art

1087. Re: Ferrite cores instead of a 1:1 current-choke UnUn for a Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 18:17:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <21kgd31u7k5fgf78sg1uri7mtb9b144apm@4ax.com>
Source record: 36705

On Fri, 31 Aug 2007 11:13:41 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>I also have no antenna analyzer and no means to acquire one any time
>soon... best I can do is my transmitter (cranked way back in power) and an
>SWR meter.

Hi Rick,

Then using what you have, replace the antenna analyzer with the SWR meter. That is, pass a short length of wire through the core you intend to invest in (which begs the question: Why don't you simply go to the right source and buy the right product?) and pour enough power to this "load" to see what it measures in SWR.

If it is the right material (Amidon 73, 75, or 77 material). and the right size (101 size bead) and the right frequency (60M or 12M); then you should read something less than 2:1. Make it two beads, and it would still read something less than 2:1 (but closer to 1:1).

You should note there are three variables above: material, bulk, and frequency. Bulk adds isolation. Material and frequency go hand-in-hand. As you have ferrite of unknown parentage you are adrift on two counts and must accept what this bastard will have to offer. You might be lucky, but it will undoubtedly cost more than doing it the right way.

Anyway, returning to the practical investigation.... A 101 size bead will support perhaps a Watt or two at 100% duty cycle and you can raise that by the inverse proportion of DC. If you pour 100W into this load to read the SWR, I doubt your meter will have a 10mS peak reading capture time (unless you have a Daiwa). If you pour 1W into it, you probably are not going to get a reading at all (that lends any confidence at being accurate). 10W excitation should be adequate and lest anyone complain that the SWR is indistinguishable from that arising due to X (we are seeking R) - I will anticipate that as I have in the past and ask you to grab onto the bead immediately after the reading.

A blister on your finger and thumb will stand in telling corroboration to the reading of nearly 1:1 that the bead exhibits an R of 50 Ohms. A cool bead will be silent testimony to high X. It is sometimes a wonder here how commonsense has to be spelled out.

Now, as you have none of the "right" variables, you need only judge what you DO HAVE in relation to them. Merely repeat this with the Radio Shack item. You need to balance the consideration that

bulk=Resistance and that your SWR reading may rise because it is
either:
1. Doing TOO good;
or
2. Doing TOO poorly.

The Radio Shack bulk may lend itself to presenting 100 Ohms (too good)
or is just sputtering along with 10 Ohms (too poor). As with
resistors, you can judge this through series/parallel combinations to
seek improved indications.

If two loads in parallel bring the SWR reading into 1:1, then you have
your baseline to build out to the proper sized Isolator. If two loads
in series bring the SWR reading into 1:1, then you have your baseline
to build out to the proper sized Isolator. (Amazing what knowledge
can do when you have just a little of it.)

This, of course, returns us to just how many Radio Shack clip-ons do
you need? My guess is they could handle 4W to 8W at 100% D.C. and if
one of them exhibits 50 Ohms you can do the math - depending on your
choking requirements.

>I have no way to define "expected performance" any way other than that.

Then we once again enter into the fascinating world of Amateur
experimentation, an arena that comes with no guarantees and the
prospects of blistered fingers. As you have no way of quantifying
your goal, you have to judge it subjectively (no one else can do this
for you, as you are the subject in subjectivity).

Not knowing what Z is present at the distal end of the 20 Foot
transmission line drop can demand isolation from 500 Ohms to 50,000
Ohms. It is unlikely that the isolation will absorb all the power
your rig has to offer (but if it does, it will make a nice SWR match,
one of those glowing rewards for focusing on the wrong goal). So, by
these metrics, you can get along fine with 10 to 1000 of the mythical
50 Ohm Radio Shack clip-ons.

Start with 10 (adjusted in proportion to their actual R) and add more
until you have met your expected performance. Simple, n'est pas?

73's
Richard Clark, KB7QHC

1088. Re: Convertible 40M vertical to 20M vert dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 18:29:18 UTC
From: nm5k@wt.net
Message-ID: <1188584958.992822.141280@x40g2000prg.googlegroups.com>
Source record: 36706

On Aug 31, 10:13 am, Tim Shoppa <sho...@trailing-edge.com> wrote:
> I am postulating a full-height quarter-wave 40M vertical that is
> switchable (relays halfway up?) to a 20M vertical dipole.
>

Myself, I would base feed for both bands. Say if you used a
"gamma loop" matching scheme for 20m.. Use a relay/relays
to cut the connection from the inductor to the radiator. With
multi-pole relays, a set could be used to connect the feed
directly to the radiator when the inductor is disconnected.
Of course, it would need to be weatherproofed.
I used a similar setup to switch my 40m elevated GP to
a 5/8 GP for 17m. If I left the inductor used for 17m inline,
my resonant 40m frequency was about 6.900 or so.. So I used
a 24v relay to disconnect and bypass that coil for use on 40m.
You could also use a regular coil for tuning the 1/2 wave,
but I prefer a single turn which is tapped at the best point.
If a cap is needed, and it probably would be on 20m, I use
a length of coax. "open at the far end, not shorted".
One thing about splitting for a 1/2 wave.. You gotta have
insulators in the middle of the mast, and then rig a way
to bypass for 1/4 wave use. I guess it's do-able, but I'd
just as soon use a one piece radiator and feed at the base
for all bands. BTW, with even more rigging, it could be used
for 3 bands, if you added 17m running as a 5/8 GP.
All you need for that band is a series coil at the feedpoint.
I used 24v fan relays usually used for switching fan motors,
and ran wire down to a 24v transformer here in the shack.
I'd unplug it for 17, and plug it in for 40m.
BTW, yes I did also unplug and throw that wiring outside
in bad T-storms.. Same as my feedlines.. :/
That wiring ran from the feedpoint at 36 ft, down the mast
to the shack. Could carry a hefty pulse if I took a strike
same as the feedlines.
The radials should be no problem. IE: 1/4 WL for 40m.
I think most BC users that run 1/2 waves, use a field
of 1/2 wave radials.. So, should work out ok I would
think. Besides, any radials on/in the ground are going to
be fairly detuned anyway. A 1/2 wave really needs no
radials, except that ground losses will occur when
ground mounted, same as any other antenna. But
they will be less than a 1/4 wave used on the same
ground mount, and same band. The set of 1/2 wave
radials should keep that loss fairly low. Will be

better than the 1/2 wave ground mounted with no radials.
MK

1089. Re: Ferrite cores instead of a 1:1 current-choke UnUn for a Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 18:33:36 UTC
From: dplatt@radagast.org
Message-ID: <0h3mq4-p9r.ln1@radagast.org>
Source record: 36707

In article <pan.2007.08.31.15.13.39.969578@from.qrz.com>,
Rick (W-A-one-R-K-T) <get.my.email@from.qrz.com> wrote:

>You mention the "UnUn that comes with the commercial unit"... not sure if
>you meant a commercially-available CW antenna, but this one is being built
>from scratch using a W2AU-type 4:1 balun and some lengths of insulated
>copper-clad steel wire I have here.

For what it's worth - last year, I home-brewed a coaxial RF isolator/choke, in an attempt to fix an RF-incursion problem involving our RACES 40/80 trap dipole and the phone system in the building at which the dipole is installed.

I used some fairly large-diameter ferrite beads - probably 43 material, if I remember the impedance readings I took correctly. They were an inch or so long... I superglued a bunch of them together (around 8 or 10, I think) to form a long ferrite cylinder. The ID was large enough to let me get a length of RG-8X through the cylinder a total of three times... in effect, making a very long, thin three-turn choke. The whole thing was installed in a length of PVC pipe with end caps and N connectors.

The common-mode impedance along the braid of the coax turned out to be quite high. If I recall correctly, it was at the upper limit of my MFJ-259's ability to read at 3.5 MHz (probably upwards of 1500 ohms, mostly reactive) and was off-the-scale at 40 meters and all higher frequencies. Whatever capacitive coupling occurred between the turns didn't amount to enough to matter.

[Unfortunately, it didn't fix the RF incursion problem, which later experiments proved was caused by near-field pickup by the phone lines of RF from the antenna itself, and not due to feedline RF at all.]

You could probably build a similar unun using the Radio Shack ferrites. If they aren't big enough to allow multiple turns of RG-8X, you could use a short length of RG-58 or an even smaller-gauge 50-ohm coax. Losses in this short a length of thin coax shouldn't amount to enough at HF to matter, or to cause appreciable heating unless you're running very high amounts of power.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1090. Re: Convertible 40M vertical to 20M vert dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 18:55:54 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <j0pgd39osblsvcoeog71rcp6o9u3vf5ovj@4ax.com>
Source record: 36708

On Fri, 31 Aug 2007 08:13:56 -0700, Tim Shoppa
<shoppa@trailing-edge.com> wrote:

>I am postulating a full-height quarter-wave 40M vertical that is
>switchable (relays halfway up?) to a 20M vertical dipole.
>
>Seeing as how my two favorite bands are 40M and 20M, seems to make
>sense to me, but googling to see if anyone else has done this sort of
>thing in the past doesn't give me a lot of hits. Is this workable? I
>am not yet ready to go (budgetwise or real-estate-wise) to a real 20M
>beam and I'd like to increase my oomph for DXing on 40M (right now I
>have a wire dipole in the trees and am having a blast).
>
>Looks to me I could build an extremely lightweight small 5M high tower
>with a 5M metal mast on top. (I know, real conductor diameter will
>mess those numbers up a little bit). And a relay between the mast and
>the tower would either put them in series for feed as a quarter-wave
>40M vertical, or separate the two and let me feed halfway up as a 20M
>vertical dipole.
>
>How would the ground radials used on 40M potentially mess up the use
>as a 20M vertical dipole?
>
>One idea for a lightweight 40M full-height tower/mast vertical with
>insulated-from-ground mounting is shown at http://svc.cc/antena.html
>

Take a look at this.

http://k6mhe.com/files/DualBandVert.pdf

73,
Danny, K6MHE

1091. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 19:17:28 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb9pgl$n15$1@news.albasani.net>
Source record: 36709

Dave Oldridge wrote:

> ...
> The real reason that photons are not a particularly useful concept in RF
> design is that they are vanishingly small in energy, due to the rather
> long wavelenths. I doubt if there is any equipment that would actually
> intercept a MEASURABLE photon at most radio frequencies. You cannot
> always say that of short-wavelength gamma rays or even light.

Yeah. And, photons like razor edges, with a passion! <ROFLOL!>

JS

1092. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 19:20:50 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb9pmv$n15$2@news.albasani.net>
Source record: 36710

art wrote:

> ...
> build on anything else is to place a foundation on sand. Particulates
> DO have mass
> ...
> Regards
> Art
>

Ever seen a radiometer? What do you think turns those vanes--if it
ain't the "mass" of photons striking the plates? So, back to square
one, again?

Regards,
JS

1093. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 19:23:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb9ps2$n15$3@news.albasani.net>
Source record: 36711

K7ITM wrote:

> ...
> the low energy per quantum is due to. That might be more interesting
> than a lot else that's gone on in this thread, so far.
>

Don't be surprised if you do not receive a greater return than what you put into this thread, don't expect much at his point ... perhaps later?

Regards,
JS

1094. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 19:27:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fb9q45$n15$4@news.albasani.net>
Source record: 36712

Cecil Moore wrote:

> ...
> Whoever developed the technique of correctly
> "guessing" the state of quantum Qubit particles
> without collapsing their probability functions
> gets a tip of the hat from me.

Stop already Cecil, I already know your mind has this kind of potential ...

But, we can have some fun with 'em :-)

Regards,
JS

1095. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 19:36:04 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vhqgd3lbj2brr2ahpjcg0hoje2mgm0m47u@4ax.com>
Source record: 36713

On Fri, 31 Aug 2007 12:20:50 -0700, John Smith
<assemblywizard@gmail.com> wrote:

> What do you think turns those vanes--if it
>ain't the "mass" of photons striking the plates?

Hmm, dare anyone ask either of you for a simple computation to support
this notion of "mass?"

If Arthur is so wedded to a Newtonian universe, it should be a walk in
the apple orchard.

A very simple question of rotational kinematics:
How much power is required to accelerate
the 1 gram mass of the vanes
from 0cM/s to 1cM/s in 10s?

Extra credit:
How many photons does it take to do this?

Extra special, super duper credit:
What is the weight of one of those photons?

You can use your calculator to convert mass to slugs in an Earth
environment. Of course, this may be an egregious speculation of
ability if the prior compuations are begged (or whined) off with
extraneous demands (not worth Newton's spit) for parsing F=MA.

73's
Richard Clark, KB7QHC

1096. Re: Convertible 40M vertical to 20M vert dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 19:58:00 UTC
From: Dave <noone@nowhere.com>
Message-ID: <cp_Bi.18$es2.10@trndny09>
Source record: 36714

lots of problems with that... how do you decouple the 20m midpoint feedline from the 40m vertical? how do you get the 20m feedline up there without messing up the 40m performance? where and how do you put and connect radials for 40m?

a slightly more practical thing would be to have a relay half way up to cut off the top section to turn the 40m vertical into a 20m vertical... but the best and most common way is to put a trap at the mid point to cut it off automatically on 20m... add more traps, you get more bands.

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message news:1188573236.141348.44340@r29g2000hsg.googlegroups.com...
>I am postulating a full-height quarter-wave 40M vertical that is
> switchable (relays halfway up?) to a 20M vertical dipole.
>
> Seeing as how my two favorite bands are 40M and 20M, seems to make
> sense to me, but googling to see if anyone else has done this sort of
> thing in the past doesn't give me a lot of hits. Is this workable? I
> am not yet ready to go (budgetwise or real-estate-wise) to a real 20M
> beam and I'd like to increase my oomph for DXing on 40M (right now I
> have a wire dipole in the trees and am having a blast).
>
> Looks to me I could build an extremely lightweight small 5M high tower
> with a 5M metal mast on top. (I know, real conductor diameter will
> mess those numbers up a little bit). And a relay between the mast and
> the tower would either put them in series for feed as a quarter-wave
> 40M vertical, or separate the two and let me feed halfway up as a 20M
> vertical dipole.
>
> How would the ground radials used on 40M potentially mess up the use
> as a 20M vertical dipole?
>
> One idea for a lightweight 40M full-height tower/mast vertical with
> insulated-from-ground mounting is shown at http://svc.cc/antena.html
>
> Tim N3QE
>

1097. Re: Convertible 40M vertical to 20M vert dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 20:02:24 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1188590544.243394.165900@y42g2000hsy.googlegroups.com>
Source record: 36715

On Aug 31, 2:55 pm, Danny Richardson <n_gr...@k6mhe.com> wrote:
> On Fri, 31 Aug 2007 08:13:56 -0700, Tim Shoppa
>
>
>
>
>
> <sho...@trailing-edge.com> wrote:
> >I am postulating a full-height quarter-wave 40M vertical that is
> >switchable (relays halfway up?) to a 20M vertical dipole.
>
> >Seeing as how my two favorite bands are 40M and 20M, seems to make
> >sense to me, but googling to see if anyone else has done this sort of
> >thing in the past doesn't give me a lot of hits. Is this workable? I
> >am not yet ready to go (budgetwise or real-estate-wise) to a real 20M
> >beam and I'd like to increase my oomph for DXing on 40M (right now I
> >have a wire dipole in the trees and am having a blast).
>
> >Looks to me I could build an extremely lightweight small 5M high tower
> >with a 5M metal mast on top. (I know, real conductor diameter will
> >mess those numbers up a little bit). And a relay between the mast and
> >the tower would either put them in series for feed as a quarter-wave
> >40M vertical, or separate the two and let me feed halfway up as a 20M
> >vertical dipole.
>
> >How would the ground radials used on 40M potentially mess up the use
> >as a 20M vertical dipole?
>
> >One idea for a lightweight 40M full-height tower/mast vertical with
> >insulated-from-ground mounting is shown athttp://svc.cc/antena.html
>
> Take a look at this.
>
> http://k6mhe.com/files/DualBandVert.pdf
>
> 73,
> Danny, K6MHE

That is very, very interesting Danny. I appreciate the work you did
and the beautiful pictures! I see your conclusion that the antenna
must be at least a physical quarter wave on 40M and that matches
exactly my sentiment (if not experience or knowledge) about building
such a vertical.

Do you have any pics/docs of the telescoping 35-foot whip? I've gotten pretty good with building wire antennas and hoisting them up into the sky but have to plead massive ignorance when it comes to whips etc. PY1BEK's lightweight tower config looks pretty sweet though!

Tim.

1098. Re: Vertical antenna problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 20:03:19 UTC
From: Neno <dobardabarBEZSPAMA@mail.com>
Message-ID: <fb9s6f$6qi$1@news1.carnet.hr>
Source record: 36716

```
>>
> What is the SWR at 14.05? Assuming a good ground, at resonance the SWR
> will be 1.5:1for 50 Ohm coax; 2:1 for 75 Ohm.
>
> Tam/WB2TT
>

I have 1.3:1 for 50 Ohm coax now.
Look my answer to Cecil.
73
```

1099. Re: Vertical antenna problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 20:08:43 UTC
From: Neno <dobardabarBEZSPAMA@mail.com>
Message-ID: <fb9sgf$7jg$1@news1.carnet.hr>
Source record: 36717

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:F8XBi.747$4J3.541@newssvr22.news.prodigy.net...
> neno wrote:
>> What do You suggest?
>> To cut only radials to 3.25m or vertical and radials to 4.7m?
>> What is better?
>
> Or (3) you could leave the radials as they are
> and shorten the vertical wire.
>
> The physical environment will shift the
> resonant frequency away from that predicted
> by EZNEC as modeling is not an exact science.
>
> Any of the three choices will work and none of
> them will result in the exact resonant frequency
> you desire. In the end, to get the frequency
> exact, you will be required to "cut and try" in
> an iterative process that often forces you to
> add back one inch of the two inches you just
> removed. :-)
> --
> 73, Cecil http://www.w5dxp.com

I decided to cut radials because it was the easiest job considering that
vertical is elevated 9m up the ground.
I cut radials to 3.25m and now the SWR is 1.3:1 on 14.020 .
I left the vertical to 5.1m .
I will test the antenna this days.
Thanks for help.
Eznec was very helpful also.
73 9A4MN Neno

1100. Re: Vertical antenna problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 20:11:24 UTC
From: Neno <dobardabarBEZSPAMA@mail.com>
Message-ID: <fb9sle$7vl$1@news1.carnet.hr>
Source record: 36718

>
> Hello Neno,
>
> Influence of PVC wire insulation on wave propagation is just a few
> percent. Most of the field lines go through air. I did a calculation
> myself (however results are in Dutch language). When the wire is
> thicker, the influence of same layer of insulation becomes less.
>
> The soil has significant influence on resonant frequency and steepness
> of resonance of the radials. When you use many of them the length
> becomes less critical. You can also use elevated radials (for example
> about 4 radials 1..2 m above ground).
>
> However when VSWR is OK with short radiator or shorter radials and you
> don't have common mode problems in the coaxial feed line, I would not
> worry.
>
> When you are still curious, you might model the nearby structures in
> your NEC file and try to simulate the influence. A mast at 5m distance
> is within the near field, so you may expect some coupling.
>
> Instead of cutting, you can also roll them up (beginning at the end),
> so you can re-extend them when required).
>
> Best regards,
>
> Wim
> PA3DJS
> www.tetech.nl
>

Thanks for help.
I cut radials to 3.25m and left vertical to 5.1m .
Now SWR is 1.3:1 on 14.020
I hope it will work good.
Eznec was very helpful too.
73 9A4MN Neno

1101. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 20:54:51 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1188593691.592248.43930@22g2000hsm.googlegroups.com>
Source record: 36719

On Aug 31, 12:36 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Fri, 31 Aug 2007 12:20:50 -0700, John Smith
>
> <assemblywiz...@gmail.com> wrote:
> > What do you think turns those vanes--if it
> >ain't the "mass" of photons striking the plates?
>
> Hmm, dare anyone ask either of you for a simple computation to support
> this notion of "mass?"
>
> If Arthur is so wedded to a Newtonian universe, it should be a walk in
> the apple orchard.
>
> A very simple question of rotational kinematics:
> How much power is required to accelerate
> the 1 gram mass of the vanes
> from 0cM/s to 1cM/s in 10s?
>
> Extra credit:
> How many photons does it take to do this?
>
> Extra special, super duper credit:
> What is the weight of one of those photons?
>
> You can use your calculator to convert mass to slugs in an Earth
> environment. Of course, this may be an egregious speculation of
> ability if the prior compuations are begged (or whined) off with
> extraneous demands (not worth Newton's spit) for parsing F=MA.
>
> 73's
> Richard Clark, KB7QHC

I'm left with the impression that JS, at least, hasn't a clue about how those little radiometers actually work. (Or perhaps he just thinks he's having fun with a little trolling.) Answers to your questions, of course, won't get him there. Here are a couple of questions that just might: Just how good is the vacuum in one of those radiometers? What happens if you evacuate the globe down to, say, 1e-6 Torr?

Cheers,
Tom

1102. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 21:40:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bt1hd3pjjd57vaspibvlgec1r6rgaso4so@4ax.com>
Source record: 36720

On Fri, 31 Aug 2007 13:54:51 -0700, K7ITM <k7itm@msn.com> wrote:

>I'm left with the impression that JS, at least, hasn't a clue about
>how those little radiometers actually work.

Hi Tom,

I was thinking more of Arthur who is quick to hug Newton's corpse to
prove his own "theory."

>(Or perhaps he just
>thinks he's having fun with a little trolling.)

Brett will plead guilty to that faster than an Idaho Senator in a
Minneapolis Airport lockup.

>Answers to your
>questions, of course, won't get him there.

Actually, I think they would. ...But not so handily as scribbling a
few lines of fluff passing as deep insights into the mysteries
Einstein couldn't fathom (like building a gaussian array).

73's
Richard Clark, KB7QHC

1103. Re: Ferrite cores instead of a 1:1 current-choke UnUn for a Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 22:48:52 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.08.31.22.48.51.179300@from.qrz.com>
Source record: 36721

Thanks to all for your help on this ferrite core question.

The objective was to see if I could put up the antenna with only what I have on hand... and I have a 50-foot length of RG-8X and four of those radio shack ferrite cores. I also have an MFJ unun and so I could cut the coax at 22 feet and put in a couple of coax connectors, and use the unun, I just hadn't gotten around to doing that and anyway I don't have the connectors (but, the Radio Shack is just down the street).

Someone said "try it and see what works", so I did that... put up the antenna this afternoon. Unfortunately it started raining and the XYL started yelling at me to get my @$$ off of the roof before I fell off :-), so I didn't get the unun OR the ferrite cores installed yet.

I figured what the heck, may as well try it without the choke and see what happens. I inserted the unun into the line where the coax comes in the window and fired it up. It actually seems to work better than my inverted V on 20 meters (only band I've tried it on so far), though the difference isn't exactly what one might call dramatic. Also the SWR is pretty poor but nothing the rig's internal tuner can't handle.

I'll get the cores or the unun up there tomorrow and see how it acts then.

1104. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-08-31 23:22:21 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1188602541.125333.33810@k79g2000hse.googlegroups.com>
Source record: 36722

On 31 Aug, 14:40, Richard Clark <kb7...@comcast.net> wrote:
> On Fri, 31 Aug 2007 13:54:51 -0700, K7ITM <k7...@msn.com> wrote:
> >I'm left with the impression that JS, at least, hasn't a clue about
> >how those little radiometers actually work.
>
> Hi Tom,
>
> I was thinking more of Arthur who is quick to hug Newton's corpse to
> prove his own "theory."
>
> >(Or perhaps he just
> >thinks he's having fun with a little trolling.)
>
> Brett will plead guilty to that faster than an Idaho Senator in a
> Minneapolis Airport lockup.
>
> >Answers to your
> >questions, of course, won't get him there.
>
> Actually, I think they would. ...But not so handily as scribbling a
> few lines of fluff passing as deep insights into the mysteries
> Einstein couldn't fathom (like building a gaussian array).
>
> 73's
> Richard Clark, KB7QHC

Einstein hasbeenproven wrong many many times.
Einstein also did not produce the Gaussian array
since it would prove him wrong once again.
Haven't you got anything to contribute of a technical nature
other than following news from Minninapolis airport stalls ?

1105. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 00:11:45 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <re9hd35ekun9svp9kurtioc8ansosj3eac@4ax.com>
Source record: 36723

On Fri, 31 Aug 2007 16:22:21 -0700, art <aunwin@insightbb.com> wrote:

>Einstein hasbeenproven wrong many many times.

Hi Arthur,

Saying that was simpler than doing Newton's math, certainly.
:-P....
(the web version of Newton's rasberry)

Let's make this simpler. Can you give us the mass of a photon within
6 orders of magnitude?

Can Brett?

And, more important, if I did, would you reference me? (Gad what a
prospect that would be - enough to convert satan to scientology.)

For extra credit for that massive Photon:
What is its dimensions? (radius, distance on a side, whathaveyou)

Extra stupidous credit question:
If a 10 base-pair strand of DNA is 3.5 nM long;
and we have a 550 nM Photon illuminating it;
would it crush the strand?

Hint:
The DNA strand has mass, we can weigh and tell you that, and the
Photon (if massive) dimensions are 157 time larger. Now this may be
like comparing feathers to lead, so perhaps you might know what the
Relative Density of Photons are?

73's
Richard Clark, KB7QHC

1106. Re: Convertible 40M vertical to 20M vert dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 00:25:29 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1188606329.495010.277730@o80g2000hse.googlegroups.com>
Source record: 36724

Dave wrote:
> lots of problems with that... how do you decouple the 20m midpoint feedline
> from the 40m vertical? how do you get the 20m feedline up there without
> messing up the 40m performance? where and how do you put and connect
> radials for 40m?
>
> a slightly more practical thing would be to have a relay half way up to cut
> off the top section to turn the 40m vertical into a 20m vertical... but the
> best and most common way is to put a trap at the mid point to cut it off
> automatically on 20m... add more traps, you get more bands.
>
> "Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
> news:1188573236.141348.44340@r29g2000hsg.googlegroups.com...
> >I am postulating a full-height quarter-wave 40M vertical that is
> > switchable (relays halfway up?) to a 20M vertical dipole.
> >
> > Seeing as how my two favorite bands are 40M and 20M, seems to make
> > sense to me, but googling to see if anyone else has done this sort of
> > thing in the past doesn't give me a lot of hits. Is this workable? I
> > am not yet ready to go (budgetwise or real-estate-wise) to a real 20M
> > beam and I'd like to increase my oomph for DXing on 40M (right now I
> > have a wire dipole in the trees and am having a blast).
> >
> > Looks to me I could build an extremely lightweight small 5M high tower
> > with a 5M metal mast on top. (I know, real conductor diameter will
> > mess those numbers up a little bit). And a relay between the mast and
> > the tower would either put them in series for feed as a quarter-wave
> > 40M vertical, or separate the two and let me feed halfway up as a 20M
> > vertical dipole.
> >
> > How would the ground radials used on 40M potentially mess up the use
> > as a 20M vertical dipole?
> >
> > One idea for a lightweight 40M full-height tower/mast vertical with
> > insulated-from-ground mounting is shown at http://svc.cc/antena.html
> >
> > Tim N3QE
> >

assuming the only problem is the switching a relay could be arranged
to extend the antenna for 40M operation if it was air activated. I
might try making the tower so it was 1/2 wl end fed antenna on 20m and
1/4wl on 40. If you can insulate the base from ground that should be
easy enough to do.

Jimmie

1107. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 00:43:42 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <gsidnRlxYscLKEXbnZ2dnUVZ_vCknZ2d@bright.net>
Source record: 36725

Dear Crew: I am delighted with the content, care, and thought contained in this thread. The continual issue of all measurements comprising at least two numbers (estimate of the quantity measured and an estimate of the uncertainty of the former) needs always to be dealt with. While the law-of-large-numbers suggests that a normal distribution is a good assumption to start with, experience shows that sometimes normal is not normal. The famous paper by Costa (Dec 1959, Proc. of the (wonderful) IRE) about communication in the presence of noise and other signals notes that a Poisson distribution is the appropriate distribution ("Poisson, Shannon, and the radio amateur").

I had the opportunity at Ohio State to craft a system that measured very wide BW noise that changed slowly and to add statistical measures to what was measured. Today, the task would be trivial - a sound card would run circles around what I did with a voltage to frequency converter, accumulator, counter-made-into-a-sidereal-clock, punched paper tape, and an IBM 1620.

It is not enough just to put a number on something. We must remember the early speed-of-light measurements that had a mean that turned out to be outside of latter measurement's uncertainty band. An investigation of the old log books found that not all of the data had been used! When all of the data was used, the mean was within the more modern measurement's span.

73, Mac N8TT
--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:i52fd3llebgnt5p2b78r1sr8780v46773v@4ax.com...
> On Thu, 30 Aug 2007 22:46:46 GMT, Owen Duffy <none@no.where> wrote:
>
>

1108. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 00:55:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbadaprgt1@news.albasani.net>
Source record: 36726

Richard Clark wrote:

> ...
> Actually, I think they would. ...But not so handily as scribbling a
> few lines of fluff passing as deep insights into the mysteries
> Einstein couldn't fathom (like building a gaussian array).
>
> 73's
> Richard Clark, KB7QHC

:-)

Regards,
Brett! :-)

1109. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 00:58:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbadgj$sf4$1@news.albasani.net>
Source record: 36727

art wrote:

> ...
> Einstein hasbeenproven wrong many many times.
> Einstein also did not produce the Gaussian array
> since it would prove him wrong once again.
> Haven't you got anything to contribute of a technical nature
> other than following news from Minninapolis airport stalls ?
>

Art:

Actually, when I first came into this group, I was on Richards' A55 ...

I changed my mind, he "encrypts" chit into his text which is not a first apparent ... check it out dude ...

Regards,
JS

1110. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 01:11:20 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1188609080.004987.326490@50g2000hsm.googlegroups.com>
Source record: 36728

On 31 Aug, 17:11, Richard Clark <kb7...@comcast.net> wrote:
> On Fri, 31 Aug 2007 16:22:21 -0700, art <aun...@insightbb.com> wrote:
> >Einstein hasbeenproven wrong many many times.
>
> Hi Arthur,
>
> Saying that was simpler than doing Newton's math, certainly.
> :-P....
> (the web version of Newton's rasberry)
>
> Let's make this simpler. Can you give us the mass of a photon within
> 6 orders of magnitude?
>
> Can Brett?
>
> And, more important, if I did, would you reference me? (Gad what a
> prospect that would be - enough to convert satan to scientology.)
>
> For extra credit for that massive Photon:
> What is its dimensions? (radius, distance on a side, whathaveyou)
>
> Extra stupidous credit question:
> If a 10 base-pair strand of DNA is 3.5 nM long;
> and we have a 550 nM Photon illuminating it;
> would it crush the strand?
>
> Hint:
> The DNA strand has mass, we can weigh and tell you that, and the
> Photon (if massive) dimensions are 157 time larger. Now this may be
> like comparing feathers to lead, so perhaps you might know what the
> Relative Density of Photons are?
>
> 73's
> Richard Clark, KB7QHC

John I think the thread just died. Opponnent have no answers
so they pose questions to change the subject. I believe they have no
idea
either way what is correct since they don't know enough to debate it.
Give them time to read a book and see what they can come up with. It
certainly will not be mathematical based on their mathematical
responses
to Gaussian law integral equations and the equality to Maxwellian
laws.

In the U.K. everything is not equated to size as a measure of
importance
and their is a rhyme that goes.... For the sake of a nail a shoe was
lost.
For the sake of a shoe a horse was lost. For the sake of a horse a
king was lost.
And for the sake of a king a kingdom was lost. A little nail can have
huge importance
way beyond its size.
On the other side of the coin when the U.S. exploded an airial H bomb
in the fifties
the emitted radio energy knocked out all of Honolulu's power network.
Since the bomb did not
have an antenna the particulates in the bomb must have had a horrendos
speed
where its energy blew all the fuses. No wonder the millitary
immediatly
returned to tube radios.
Yes Richard, I can see why you think what goes on at airport stalls
is
more interesting
since you are so unlike the rest of us on this thread.

1111. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 01:32:48 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1188610368.635888.116230@q3g2000prf.googlegroups.com>
Source record: 36729

On Aug 31, 2:40 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Fri, 31 Aug 2007 13:54:51 -0700, K7ITM <k7...@msn.com> wrote:
..
> >Answers to your
> >questions, of course, won't get him there.
>
> Actually, I think they would.

Seriously?? Wow.

1112. Re: Convertible 40M vertical to 20M vert dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 01:42:18 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <uufhd3hs1aga0cq1d98g0m7en7iov5kdsc@4ax.com>
Source record: 36730

On Fri, 31 Aug 2007 13:02:24 -0700, Tim Shoppa
<shoppa@trailing-edge.com> wrote:

>
>That is very, very interesting Danny. I appreciate the work you did
>and the beautiful pictures! I see your conclusion that the antenna
>must be at least a physical quarter wave on 40M and that matches
>exactly my sentiment (if not experience or knowledge) about building
>such a vertical.
>
>Do you have any pics/docs of the telescoping 35-foot whip? I've gotten
>pretty good with building wire antennas and hoisting them up into the
>sky but have to plead massive ignorance when it comes to whips etc.
>PY1BEK's lightweight tower config looks pretty sweet though!

As explained in the text the minimum ï¿½-wavelength for fourty-meters
was to achieve a good match on both bands. Any length from about 33'
will 35' should be fine. There is on real advantage in having it
physically resonate.

That mast is an old military surplus item. I doubt if you could locate
one today. They were used on PT boasts and some Coast Guard cutters
from WWII through the 1950s. Today your best bet would be to use
aluminum tubing or wire strung alongside one of the telescoping
portable fiberglass masts on the market today.

73,
Danny, K6MHE

1113. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 01:59:28 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2007.09.01.02.01.37.410860@example.net>
Source record: 36731
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On Thu, 30 Aug 2007 17:02:02 -0700, Don Bowey wrote:
> "Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote:
>> ...
>> I am curious here. At some point you have to switch from metallic conductors
>> and antennas to lenses and other optics. Any idea what the highest frequency
>> RF amplifier works at?
>
> It's all subject to state-of-the-art. 50 years ago 300 MHz. was complex to
> work with and 10 GHz. was considered way out there. Today 300 MHz is about
> as simple as DC and 10 GHz. is fairly straightforward to work with.
>
> I imagine that in another 50 years or less, Integrated hybrid circuits for 3
> THz. will be on the shelf items for experimenters to play with.

Whenever they discover neutronium, they can make ï¿½ngstrom-sized
klystrons. ;-)

Cheers!
Rich

1114. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 02:03:37 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2007.09.01.02.05.45.440997@example.net>
Source record: 36732
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On Thu, 30 Aug 2007 17:16:59 -0700, Dave Platt wrote:
> Tam/WB2TT <t-tammaru@c0mca$t.net> wrote:
>
>>I am curious here. At some point you have to switch from metallic conductors
>>and antennas to lenses and other optics. Any idea what the highest frequency
>>RF amplifier works at?
>
> Dunno about an RF amplifier per se.
>
> I do know that there have been some very interesting experiments with
> nanotechnology, over the past couple of years, in which tiny carbon
> nanotubes have been used as optical-frequency antennas.
>
> http://www.nanowerk.com/spotlight/spotid=1442.php has a brief writeup
> on one such.

So, is anybody making solar panels with them yet?

Thanks,
Rich

1115. Re: Ferrite cores instead of a 1:1 current-choke UnUn for a Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 02:09:30 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns999E7BA8DA77nonenowhere@61.9.191.5>
Source record: 36733

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in
news:pan.2007.08.31.22.48.51.179300@from.qrz.com:

...
> Someone said "try it and see what works", so I did that... put up the
...

Ah, you are well on the way to exploring the meaning of the term 'works' as
in 'my antenna works real well'.

Don't forget collecting a few DX QSL cards, that is often regarded as the
most conclusive evidence.

Owen

1116. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 02:21:31 UTC
From: Rich Grise <rich@example.net>
Message-ID: <pan.2007.09.01.02.23.34.962647@example.net>
Source record: 36634
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On Fri, 31 Aug 2007 02:25:14 +0200, Sjouke Burry wrote:
> Tam/WB2TT wrote:
>>
>> I am curious here. At some point you have to switch from metallic conductors
>> and antennas to lenses and other optics. Any idea what the highest frequency
>> RF amplifier works at?
>>
> I have even seen optics and electronics combined in an experimental
> Road radar for car control from Philips, radar output was a very small
> horn antenna connected to a wave guide, and in front of that they used a
> plexyglass condensor lens to make a narrow beam, like you do with light.
> Apparently those mm waves liked that plastic lens just fine.

Now that you mention it, I saw something on the same principle once, but
it was half a ping-pong ball filled with paraffin. :-)

Cheers!
Rich

1117. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 02:23:14 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1188613394.494280.41800@r29g2000hsg.googlegroups.com>
Source record: 36635

On 29 Aug, 20:47, K7ITM <k7...@msn.com> wrote:
> On Aug 29, 5:35 pm, John Smith <assemblywiz...@gmail.com> wrote:
>
>
>
>
>
> > K7ITM wrote:
>
> > > ...
>
> > > On the other hand, there's probably not much utility in discussing
> > > photons of, say, a 14MHz signal, simply because the energy contained
> > > in one quantum at that frequency is so small that you won't be able to
> > > detect it: a little less than 10^-26 joules per photon. At one
> > > photon per second, that's under 10^-26 watts, if you collect all the
> > > energy. At 50 ohms, that's less than a picovolt. Noise in a 1Hz
> > > bandwidth in a 50 ohm resistor at room temperature is about a
> > > thousand times that much. -- Yes, the energy is quantized. But the
> > > quanta are going to be _very_ difficult to distinguish.
>
> > > Cheers,
> > > Tom
>
> > If there are, indeed, as many photons being emitted by the thin edge of
> > the ribbon, as by the broad edges, what law/effect/affect is being
> > demonstrated here?
>
> > Or. why are the photons "drawn" to the thin edge with such magnitude of
> > force?
>
> The 14MHz photons are being emitted by the whole antenna, not by
> "broad edges" or "thin edges" as you suggest. You seem to be thinking
> of them as little tiny balls, or some such. That mental image just
> doesn't hold water. As I posted elsewhere in this thread, photons do
> not behave like billiard balls. They don't behave like anything you
> have encountered in the macro world we live in.
>
> There are some decent "modern physics for the masses" books that will
> explain to you some of the behaviour that you will probably think very
> strange, if you are thinking in terms of how the macro particles
> you're familiar with behave. Even particles like electrons, neutrons
> and protons don't behave like large spheres. They have distinct "wave-
> like" behaviour.

>
> As a start, it would probably help if you dropped "wave" and
> "photon" (particle) from your vocabulary when dealing with things like
> this and realize that the antenna emits a stream of quantized energy,
> with characteristics that can be described accurately without
> resorting to "particles" or "waves". If you had no idea what a
> passenger airplane was, but you were familiar with birds and busses,
> would you get into a discussion about the new thing being a bird and
> not a bus, or a bus and not a bird? Or would you realize that it has
> some characteristics of each, but is neither, and deserves a
> description all its own? Quantized radiation is rather like that.
> You will NOT describe it accurately as either "waves" or
> "particles" (in the macro sense).
>
> Cheers,
> Tom- Hide quoted text -
>
> - Show quoted text -

I like that explanation, a "packet" or a "swarm" of particles
in pulsatic form. That last additive bit is extremely important
because
the escape co ordinates change with each pulse.
This should satisfy those who seem to be more concerned with the size
or
shape of particulates. The bird part is especially interesting since a
swarm of birds
emulate equilibrium in mass form without collisions.
Art

1118. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 02:26:31 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1188613591.409899.46720@w3g2000hsg.googlegroups.com>
Source record: 36636

On 29 Aug, 12:53, John Smith <assemblywiz...@gmail.com> wrote:
> Ok. You might ask me, "Why do you laugh at people discussing antennas
> emitting photons?
>
> And, I would answer:
>
> Photon emissions from an antenna element(s) seems difficult, at best, to
> visualize (no pun intended.)
>
> Consider a 1/2 inch dia. single element antenna (monopole?) If the
> thing is emitting photons, one would think the photons are being emitted
> equally around the elements circumference.
>
> Well, now flatten that 1/2 dia rod into a very thin ribbon--however, the
> snip
>
> The photon/wave properties of rf still remains a mystery ... and proof
> hard to come by.
>
> Regards,
> JS

Come on John Study Gauss and all becomes clear
Art

1119. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 04:17:47 UTC
From: Radium <glucegen1@gmail.com>
Message-ID: <1188620267.480204.139080@22g2000hsm.googlegroups.com>
Source record: 36637
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On Aug 30, 3:08 pm, "Mike Kaliski" <michael.kali...@tesco.net> wrote:
> "Radium" <gluceg...@gmail.com> wrote in message
>
> news:1188510732.103951.83430@q5g2000prf.googlegroups.com...
>
>
>
> > Hi:
>
> > What is the highest radio frequency used for astronomy? Is it 3,438
> > GHz?
>
> > According to the link below, it is 3,438 GHz:
>
> >http://books.nap.edu/openbook.php?record_id=11719&page=11
>
> > Is 3,438 GHz the highest radio frequency used for astronomy?
>
> > Thanks,
>
> > Radium
>
> Radium
>
> As the article suggests, higher frequencies are considered as being in the
> infra red wavelengths of light, so 3,438 GHz can be considered to be at the
> upper limits of radio frequency astronomy.
>
> Visible light, ultra violet light, x-rays and gamma rays are all
> electromagnetic waves at higher frequencies and are also used for astronomy
> observations and experiments. Satellites are generally used to observe in
> the ultra violet, x-ray and gamma ray spectrums as these wave lengths are
> largely absorbed by the earth's atmosphere.
>
> Remember, there are no strict cut off frequencies where one type of
> electromagnetic wave becomes another type. Radio merges into infra red which
> merges into visible light, ultra violet, x-rays and so on. Any limits are
> purely arbitary ones applied by humans in order to categorise the way in
> which electromagnetic waves of a certain frequency can be expected to
> behave.
>
> Look at a colour palette. It is easy to pick out the primary colours.
> Everyone who isn't colour blind can pick out red, blue, green, yellow etc.

> But where do you draw the line to decide where red becomes green, blue or
> yellow? The colours slowly merge from one to another just as the
> characteristics of radio waves change as frequency increases.
>
> Mike G0ULI

Sorry, I meant to ask whether 3,438 GHz is the highest radio frequency used to receive audio signals from outer space. I should have made my question more specific. Radio-astronomers study sounds from the sun as well as visual data.

I wonder if a space station with a 3,438 GHz AM receiver could pick up any extremely-distant audio signals between 20 to 20,000 Hz [from magnetars, gamma-ray-bursts, supernovae and other high-energy but cosmic objects] after demodulating the 3,438 GHz AM carrier wave.

1120. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 05:06:14 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns999E999F45A9Bnonenowhere@61.9.191.5>
Source record: 36638

Owen Duffy <none@no.where> wrote in
news:Xns999CCD5A9612Anonenowhere@61.9.191.5:

...
> Graphically, the distributions are shown at
> http://www.vk1od.net/nfm/temp.gif .

The graphic has a different URL, and is now incorporated in a write up of
the experiment, draft at http://www.vk1od.net/nfm/multimeter.htm .

Owen

1121. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 05:48:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <v5uhd3944e4c6quob0rs06sp1gjuoa9sa7@4ax.com>
Source record: 36639

On Fri, 31 Aug 2007 18:11:20 -0700, art <aunwin@insightbb.com> wrote:

>Opponnent have no answers

Hi Arthur,

Can't substantiate the mass of the Photon? Your admission puts the
amen to it. Your pronouncements thus enter into the category of
superstition.

73's
Richard Clark, KB7QHC

1122. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 13:00:46 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1188651646.797192.222590@y42g2000hsy.googlegroups.com>
Source record: 36640

On Aug 31, 3:36 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Fri, 31 Aug 2007 12:20:50 -0700, John Smith
>
> <assemblywiz...@gmail.com> wrote:
> > What do you think turns those vanes--if it
> >ain't the "mass" of photons striking the plates?
>
> Hmm, dare anyone ask either of you for a simple computation to support
> this notion of "mass?"
>
> If Arthur is so wedded to a Newtonian universe, it should be a walk in
> the apple orchard.
>
> A very simple question of rotational kinematics:
> How much power is required to accelerate
> the 1 gram mass of the vanes
> from 0cM/s to 1cM/s in 10s?
>
> Extra credit:
> How many photons does it take to do this?
>
> Extra special, super duper credit:
> What is the weight of one of those photons?
>
> You can use your calculator to convert mass to slugs in an Earth
> environment. Of course, this may be an egregious speculation of
> ability if the prior compuations are begged (or whined) off with
> extraneous demands (not worth Newton's spit) for parsing F=MA.
>
> 73's
> Richard Clark, KB7QHC

Uhhh, gawd, I hate to even get into THIS mess... But, somebody has
gotta do it...

First guys, photons hitting the blades of the radiometer do not turn
it by F=MA... If it did <were we so lucky> then NASA is wasting a
hell of a lot of money designing the mars rockets when all they have
to do is have the space shuttle throw out a sail and have their heads
snap back as they are accellerated like a half drunk blond hitting the
gas pedal in a red corvette...
Actually, the radiometer blades turn because infrared energy
differentially heats the black surface of the blade as opposed to the
silver surface, causing it to differentially heat the local air
molecules on that side of the blade as opposed to the silver side...

The more energetic bombardment of the black surace by the heated molecules as opposed to the less energetic bombardment on the silver surface causes a differential in pressure that pushes the blade on its way...
(no Virginia, that is not a vacuum inside the radiometer, just high altitude - and yes there is no Santa Claus - now come over here and sit on my lap)

denny

1123. Re: Convertible 40M vertical to 20M vert dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 13:25:01 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1188653101.942489.174460@d55g2000hsg.googlegroups.com>
Source record: 36641

With a tubing vertical you can run the coax up the inside of the lower half to feed the dipole and use relays to switch between base feed and center feed for changing bands... GAP does something similar with traps (after assembling a GAP for a local ham I am not a fan of GAP antennas, their basic idea is sound however) You will need a choke coil right at the base and probably should bury the feedline into the soil as deeply as you can trench it - at least 3 or 4 feet - and have another choke a quarter wave back from the feed point... Lots of work, not much extra cost... Should work OK...
Other way to do it (and my preference) is think like a Ringo Ranger and stay with base feed... Insert a half wave, parallel feed line, phasing section at the mid point and get the benefit of 2 quarter wave in phase radiators on 20 meters... Short this phasing line out for 40 meters.. Again, run the relay wiring inside the lower tube...

denny - k8do
In business as "Solutions are Us" - as long as I don't have to actually do the work!

1124. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 15:44:45 UTC
From: msg <msg@_cybertheque.org_>
Message-ID: <13dj24llislve4c@corp.supernews.com>
Source record: 36642
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

Radium wrote:

>
>
> Sorry, I meant to ask whether 3,438 GHz is the highest radio frequency
> used to receive audio signals from outer space.

I thought perhaps the O.P. was from Europe or the U.K. and that the
comma in the above numeric was a substitution for a decimal point, but
alas the posting IP is from So. Cal. ....

Regards,

Michael

1125. Re: Convertible 40M vertical to 20M vert dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 15:55:35 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <x+bsCjD3tY2GFw3b@g3ohx.demon.co.uk>
Source record: 36643

In message <uufhd3hs1aga0cq1d98g0m7en7iov5kdsc@4ax.com>, Danny
Richardson <n_group@k6mhe.com> writes
>On Fri, 31 Aug 2007 13:02:24 -0700, Tim Shoppa
><shoppa@trailing-edge.com> wrote:
>
>>
>>That is very, very interesting Danny. I appreciate the work you did
>>and the beautiful pictures! I see your conclusion that the antenna
>>must be at least a physical quarter wave on 40M and that matches
>>exactly my sentiment (if not experience or knowledge) about building
>>such a vertical.
>>
>>Do you have any pics/docs of the telescoping 35-foot whip? I've gotten
>>pretty good with building wire antennas and hoisting them up into the
>>sky but have to plead massive ignorance when it comes to whips etc.
>>PY1BEK's lightweight tower config looks pretty sweet though!
>
>
>As explained in the text the minimum ï¿½-wavelength for fourty-meters
>was to achieve a good match on both bands. Any length from about 33'
>will 35' should be fine. There is on real advantage in having it
>physically resonate.
>
>That mast is an old military surplus item. I doubt if you could locate
>one today. They were used on PT boasts and some Coast Guard cutters
>from WWII through the 1950s. Today your best bet would be to use
>aluminum tubing or wire strung alongside one of the telescoping
>portable fiberglass masts on the market today.
>

I haven't done this myself, but I believe you can also use this
technique to persuade a 10m (well, originally CB) halfwave 'Silver Rod'
antenna to work on 20m. You first have to change the feedpoint to the
coil in the base from a tap (typically 1 turn up on a 4 turn coil) to a
simple series inductor. This involves simply lifting the end bottom of
the coil from ground. The 10m matching then becomes an L-match from low
Z to high Z (instead of tapping into a parallel-tuned circuit). The
length of the antenna will then probably need some adjustment.

On 20m, the coil is essentially a just bit of additional loading at the
base of a quarterwave. And you will, of course, need to add some 20m
quarterwave radials. The SWR may not be fantastic, but, if the coax
isn't too long, it can usually be dealt with a tuner in the shack. I
understand that you can also force it to work on 15m.
--

Ian

1126. online date . internet date services . all singles best . mature date websites

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 16:11:51 UTC
From: ushyfr8ewyrfiew8@yahoo.com
Message-ID: <1188663111.310383.268570@g4g2000hsf.googlegroups.com>
Source record: 36644

http://www.fastestpersonals.com/casual-sex-encou-9d602c1fd0502fb831befa24c8f7100d.html
http://www.fastestpersonals.com/casual-sex-encou-9e1835e55bbaa65d02d2e185ddc7ffd1.html
http://www.fastestpersonals.com/casual-sex-encou-a25598994103872827e6aab788a267b1.html
http://www.fastestpersonals.com/casual-sex-encou-a37e9f94bb8f0fab4d634d82d813eec9.html
http://www.fastestpersonals.com/casual-sex-encou-a8186e1f6bc2f2312109c94fcb9c28e6.html
http://www.fastestpersonals.com/casual-sex-encou-abfc5d5fd54521317b1ec47ce1516743.html
http://www.fastestpersonals.com/casual-sex-encou-ad2e111d10801c4ef19db2542c73d86b.html
http://www.fastestpersonals.com/casual-sex-encou-ae220e48bc451a8d275b42ff95734e48.html
http://www.fastestpersonals.com/casual-sex-encou-ae9cdacd2ee16f2f747d2941d0776dba.html
http://www.fastestpersonals.com/casual-sex-encou-af738bf2576e42681e50f9af904691bb.html
http://www.fastestpersonals.com/casual-sex-encou-b3c03ef045c76d4da6554f49a55921cf.html
http://www.fastestpersonals.com/casual-sex-encou-b6a624fe5de7afe2e592205ae1d0cb81.html
http://www.fastestpersonals.com/casual-sex-encou-b74ccb236daa567f75da9a02aee65dc8.html
http://www.fastestpersonals.com/casual-sex-encou-ba3f969f4674bc60506e8297df285938.html
http://www.fastestpersonals.com/casual-sex-encou-bb762451df9e01018ac2ce49c21bce16.html
http://www.fastestpersonals.com/casual-sex-encou-bd2e6f41cbc2ad102b0c767225151ce9.html
http://www.fastestpersonals.com/casual-sex-encou-bdc6b47c8c173c3177722805e75aea20.html
http://www.fastestpersonals.com/casual-sex-encou-c317e5e9a65dce10b0d58bec550cbd6d.html
http://www.fastestpersonals.com/casual-sex-encou-c8014389f45a68749d0216a0d400db86.html
http://www.fastestpersonals.com/casual-sex-encou-c9e299851749b60aed4f2007c94f5290.html
http://www.fastestpersonals.com/casual-sex-encou-ca137fa4836beeadc7c4c07c160851c6.html
http://www.fastestpersonals.com/casual-sex-encou-caa0f89565ae9adc0e985e32447bceb3.html
http://www.fastestpersonals.com/casual-sex-encou-cbb1de0c463b9f6d2c33af2a04031db7.html
http://www.fastestpersonals.com/casual-sex-encou-cc01515ec40ad5e964d3d81aa880389c.html
http://www.fastestpersonals.com/casual-sex-encou-ce33e917a10e715333b6d08f55b0eea7.html
http://www.fastestpersonals.com/casual-sex-encou-d28c5bc528d060db0dd3c8398c2cdfe2.html
http://www.fastestpersonals.com/casual-sex-encou-d6489f8a6a663bcb8b0d9a05c45f3938.html
http://www.fastestpersonals.com/casual-sex-encou-d6b58a6bb851bacf579a303cc9c9f7bf.html
http://www.fastestpersonals.com/casual-sex-encou-d8ad9258bfebe147efc52ef355c999c6.html
http://www.fastestpersonals.com/casual-sex-encou-d9f9e959050fec61335a34807c9bcefb.html
http://www.fastestpersonals.com/casual-sex-encou-da1ec4911a27c64a7f7d98732caae8d1.html
http://www.fastestpersonals.com/casual-sex-encou-dd740aacb9287a3423fb5fa9458c297e.html
http://www.fastestpersonals.com/casual-sex-encou-e0d490ca6dc3b694ce1d8cca60802653.html
http://www.fastestpersonals.com/casual-sex-encou-e6cc19185ec3bf6bc941285369569651.html
http://www.fastestpersonals.com/casual-sex-encou-e73b42aee541b975d641b546d5da0a08.html
http://www.fastestpersonals.com/casual-sex-encou-e7f86771a6dc5c19d8d350bf8ee66c45.html
http://www.fastestpersonals.com/casual-sex-encou-eb910a605003b1d50cfb38852c49d923.html
http://www.fastestpersonals.com/casual-sex-encou-ec4931a12d00702c21362897474937ca.html
http://www.fastestpersonals.com/casual-sex-encou-ee7eed1042492ff9734778921ed58ff4.html
http://www.fastestpersonals.com/casual-sex-encou-eedfb347c4a7fe2d226aa631b7454128.html
http://www.fastestpersonals.com/casual-sex-encou-ef083221efa5acb0bbdf0b2645449ecd.html
http://www.fastestpersonals.com/casual-sex-encou-ef1c064c85c5079cab1e6a50eac56ef9.html

womans . naked canadian young womans . international online date . date australia . chinese new year dates . internetdate . mature photo personals . best date website . date talk rooms . gods gift to us is canadian young womans . boys and young womans club of canada . date agencies uk . date internet service . date essex . uk singles . teen online date . talk . mature talk room . www date co uk . speed date . www date online . chinese new year dates 2007 . mature date finder friend personals . best date spots . internet date website . on line date service . online sex date sites . date online . date in uk . catholic . online date stories . mature sex dates . online date . date agencies . online date community . sexy date . great expectations date . uk photo personals . top date sites . date my mom uk . christian singles . nz online date . canadian young woman ashleigh . mature sex date . australia date . top 10 reasons to date a dancer . young woman guides canada . young woman guides of canada . uk school term dates . date england . canadian young womans lyrics . asian mature date . best date restaurants . online date for teens . uniform date uk . online date uk . mature friend date , personals personals secret , personals personals secret date , personals personals selection , personals personals selection date , personals personals service , personals personals service date , personals personals setup , personals personals setup date , personals personals special offer , personals personals special offer date , personals personals specialist , personals personals specialist date , personals personals standard , personals personals standard date , personals personals suggestions , personals personals suggestions date , personals personals summary , personals personals summary date , personals personals support , personals personals support date , personals personals system , personals personals system date , personals personals table , personals personals table date , personals personals techniques , personals personals techniques date , personals personals test , personals personals test date , personals personals tips , personals personals tips date , personals personals training , personals personals training date , personals personals trial , personals personals trial date , personals personals tricks , personals personals tricks date , personals personals tutorial , personals personals tutorial date , personals practice , personals practice date , personals price , personals price comparison , personals price comparison date , personals price date , personals prices , personals prices date , personals products , personals products date , personals program , personals program date , personals quality , personals quality date , personals rebate , personals rebate date , personals recommended price , personals recommended price date , personals reduction , personals reduction date , personals repair , personals repair date , personals replacement , personals replacement date , personals report , personals report date , personals retail price , personals retail price date , personals review , personals review date , personals sample , personals sample date , personals second-hand , personals second-hand date , personals secret , personals secret date , personals selection , personals

selection date , personals service , personals service date , personals setup , personals setup date , personals special offer , personals special offer date , personals specialist , personals specialist date , personals standard , personals standard date , personals suggestions , personals suggestions date , personals summary , personals summary date , personals support , personals support date , personals system , personals system date , personals table , personals table date , personals techniques , personals techniques date , personals test , personals test date , personals tips , personals tips date , personals training , personals training date , personals trial , personals trial date , personals tricks , personals tricks date , personals tutorial , personals tutorial date , phone advantage , phone advantage date , phone advice , phone advice date , phone advise , phone advise date , phone advisor , phone advisor date , phone analysis , phone analysis date , phone article , phone article date , phone assistance , phone assistance date , phone basics , phone basics date , phone beginner , phone beginner date , phone catalog , phone catalog date , phone classic , phone classic date , phone collection , phone collection date , phone combination , phone combination date , phone comments , phone comments date , phone comparison , phone comparison date , phone concept , phone concept date , phone consult , phone consult date , phone consultant , phone consultant date , phone costs , phone costs date , phone data , phone data date , phone date , phone description , phone description date , phone design , phone design date , phone directions , phone directions date , phone directory , phone directory date , phone discount , phone discount date , phone download , phone download date , phone drafts , phone drafts date , phone enquiry , phone enquiry date , phone examples , phone examples date , phone experience , phone experience date , phone expert , phone expert date , phone expertise , phone expertise date , phone facts , phone facts date , phone features , phone features date , phone fee , phone fee date , phone functions , phone functions date , phone help , phone help date , phone ideas , phone ideas date , phone improvement , phone improvement date , phone index , phone index date , phone info , phone info date , phone information , phone information date , phone inquiry , phone inquiry date , phone installation , phone installation date , phone know-how , phone know-how date , phone knowledge , phone knowledge date , phone list price , phone list price date , phone lowest price , phone lowest price date , phone maintainment , phone maintainment date , phone manual , phone manual date , phone market leader , phone market leader date , phone market overview , phone market overview date , phone method , phone method date , phone models , phone models date , phone news , phone news date , phone offer , phone offer date , phone online , phone online date , phone opportunities , phone opportunities date , phone optimization , phone optimization date , phone order , phone order date , phone organization , phone organization date , phone overview , phone overview date , phone practice , phone practice date , phone price , phone price comparison , phone price comparison

date , phone price date , phone prices , phone prices date , phone products , phone products date , phone program , phone program date , phone quality , phone quality date , phone rebate , phone rebate date , phone recommended price , phone recommended price date , phone reduction , phone reduction date , phone repair , phone repair date , phone replacement , phone replacement date , phone report , phone report date , phone retail price , phone retail price date , phone review , phone review date , phone sample , phone sample date , phone second-hand , phone second-hand date , phone secret , phone secret date , phone selection , phone selection date , phone service , phone service date , phone setup , phone setup date , phone special offer , phone special offer date , phone specialist , phone specialist date , phone standard , phone standard date , phone suggestions , phone suggestions date , phone summary , phone summary date , phone support , phone support date , phone system , phone system date , phone table , phone table date , phone techniques , phone techniques date , phone test , phone test date , phone tips , phone tips date , phone training , phone training date , phone trial , phone trial date , phone tricks , phone tricks date , phone tutorial , phone tutorial date , pictures advantage , pictures advantage date , pictures advice , pictures advice date , pictures advise , pictures advise date , pictures advisor , pictures advisor date , pictures analysis , pictures analysis date , pictures article , pictures article date , pictures assistance , pictures assistance date , pictures basics , pictures basics date , pictures beginner , pictures beginner date , pictures catalog , pictures catalog date , pictures classic , pictures classic date , pictures collection , pictures collection date , pictures combination , pictures combination date , pictures comments , pictures comments date , pictures comparison , pictures comparison date , pictures concept , pictures concept date , pictures consult , pictures consult date , pictures consultant , pictures consultant date , pictures costs , pictures costs date , pictures data , pictures data date , pictures date , pictures description , pictures description date , pictures design , pictures design date , pictures directions , pictures directions date , pictures directory , pictures directory date localregional meet . localregionaactivities meet . localregiona meet . localregioalactivities meet . localregioal meet . localreginalactivities meet . localreginal meet . localegionalactivities meet . localegional meet . local rgional activities meet . local rgional meet . local rekional activities meet . local rekional meet . local reional activities meet . local reional meet . local regonal activities meet . local regonal meet . local regiunal activities meet . local regiunal meet . local regionl activities meet . local regionl meet . local regionel meet . local regional ctivities meet . local regional ativities meet . local regional actvities meet . local regional activties meet . local regional activitis meet . local regional activities meet . local regional activitie meet . local regional activites meet . local

regional activiteis meet . local regional activiies meet . local regional actividies meet . local regional actiities meet . local regional actifities meet . local regional acivities meet . local regional acdivities meet . local regional meet . local regiona activities meet . local regiona meet . local regioal activities meet . local regioal meet . local reginal activities meet . local reginal meet . local egional activities meet . local egional meet . local meet . locaionselect meet . locaion select meet . locaion meet . locadionselect meet . locadion select meet . locadion meet . loca regional activities meet . loca regional meet . loca meet . loationselect meet . loation select meet . loation meet . loaslatvia meet . loas latvia meet . loas meet . loalregionalactivities meet . loalregional meet . loal regional activities meet . loal regional meet . loal meet . lnka meet . lnies meet . lnguagesespapolfranŋaisdeutsch meet . lnguagesespapolfranŋais meet . lnguagesespapol meet . lnguages espapol franŋais deutsch meet . lnguages espapol franŋais meet . lnguages espapol meet . lnguages meet . lnes meet . lnaka meet . lnaguagesespapolfranŋaisdeutsch meet . lnaguagesespapolfranŋais meet . lnaguagesespapol meet . lnaguages espapol franŋais deutsch meet . lnaguages espapol franŋais meet . lnaguages espapol meet . lnaguages meet . livestylefind meet . livestyle find meet . livestyle meet . livepartner meet . live partner meet . live meet . liv meet . lituanialuxembourg meet . lituania luxembourg meet . lituania meet . litings meet . lithunialuxembourg meet . lithunia luxembourg meet . lithunia meet . lithuaniluxembourg meet . lithuaniauxembourg meet . lithuanialxembourg meet . lithuanialuxmbourg meet . pictures recommended price , pictures recommended price date , pictures reduction , pictures reduction date , pictures repair , pictures repair date , pictures replacement , pictures replacement date , pictures report , pictures report date , pictures retail price , pictures retail price date , pictures review , pictures review date , pictures sample , pictures sample date , pictures second-hand , pictures second-hand date , pictures secret , pictures secret date , pictures selection , pictures selection date , pictures service , pictures service date , pictures setup , pictures setup date , pictures special offer , pictures special offer date , pictures specialist , pictures specialist date , pictures standard , pictures standard date , pictures suggestions , pictures suggestions date , pictures summary , pictures summary date , pictures support , pictures support date , pictures system , pictures system date , pictures table , pictures table date , pictures techniques , pictures techniques date , pictures test , pictures test date , pictures tips , pictures tips date , pictures training , pictures training date , pictures trial , pictures trial date , pictures tricks , pictures tricks date , pictures tutorial , pictures tutorial date , practice date , price comparison date , price date , prices date , products date , program date , quality date , rebate date , recommended price date , reduction date , repair date , replacement date , report date , retail price date , review date , sample date , second-hand date ,

secret date , selection date , service date , services advantage , services advantage date , services advice , services advice date , services advise , services advise date , services advisor , services advisor date , services analysis , services analysis date , services article , services article date , services assistance , services assistance date , services basics , services basics date , services beginner , services beginner date , services catalog , services catalog date , services classic , services classic date , services collection , services collection date , services combination , services combination date , services comments , services comments date , services comparison , services comparison date , services concept , services concept date , services consult , services consult date , services consultant , services consultant date , services costs , services costs date , services data , services data date , services date , services description , services description date , services design , services design date , services directions , services directions date , services directory , services directory date , services discount , services discount date , services download , services download date , services drafts , services drafts date , services enquiry , services enquiry date , services examples , services examples date , services experience , services experience date , services expert , services expert date , services expertise , services expertise date , services facts , services facts date , services features , services features date , services fee , services fee date , services functions , services functions date , services help , services help date , services ideas , services ideas date , services improvement , services improvement date , services index , services index date , services info , services info date , services information , services information date , services inquiry , services inquiry date , services installation , services installation date , services know-how , services know-how date , services knowledge , services knowledge date , services list price , services list price date , services lowest price , services lowest price date , services maintainment , services maintainment date , services manual , services manual date , services market leader , services market leader date , services market overview , services market overview date , services method , services method date , services models , services models date , services news , services news date , services offer , services offer date , services online , services online date , services opportunities , services opportunities date , services optimization , services optimization date , services order , services order date , services organization , services organization date , services overview , services overview date , services practice , services practice date , services price , services price comparison , services price comparison date , services price date , services prices , services prices date , services products , services products date , services program , services program date , services quality , services quality date , services rebate , services rebate date , services recommended price , services recommended price date , services

reduction , services reduction date , services repair , services repair date , services replacement , services replacement date , services report , services report date , services retail price , services retail price date , services review , services review date , services sample , services sample date , services second-hand , services second-hand date , services secret , services secret date , services selection , services selection date , services service , services service date , services setup , services setup date , services special offer , services special offer date , services specialist , services specialist date , services standard , services standard date , services suggestions , services suggestions date , services summary , services summary date , services support , services support date , services system , services system date , services table , services table date , services techniques , services techniques date , services test , services test date , services tips , services tips date , services training , services training date , services trial , services trial date , services tricks , services tricks date , services tutorial , services tutorial date , setup date , sex advantage , sex advantage date , sex advice , sex advice date , sex advise , sex advise date , sex advisor , sex advisor date , sex analysis , sex analysis date , sex article , sex article date , sex assistance , sex assi

1127. Stake pocket antenna base

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 16:31:44 UTC
From: Iitoi <Iitoi@earthlink.net>
Message-ID: <fbc45hdgg1@aioe.org>
Source record: 36650
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Putting HF into my Arizona Cadillac. I've seen, but can't find now, a mount for a Hustler (and similar) antennae which fits in a stake pocket on a pickup. Anyone point me to a source?

The Man in the Maze
QRL on Baboquivari Peak, AZ

--
Iitoi

1128. Re: Don't Tease Dick

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 17:18:21 UTC
From: SteveoOhioHomo@yahoo.com
Message-ID: <1188667101.017796.254800@y42g2000hsy.googlegroups.com>
Source record: 36645
Cross-posted to: rec.radio.cb,alt.autos.mini,rec.radio.amateur.policy,rec.autos.tech,rec.radio.amateur.antenna

On Aug 31, 1:49?am, "up.pen" <up....@up.pen.up> wrote:
> "konstans" <konst...@hotmail.com> wrote in message
>
> news:qhysfye5v$vcoewgf@127.0.0.1...> In article
<1188422703.298739.21...@57g2000hbg.googlegroups.com>,
> > kb9...@hotmail.com spewed>>
> >> I think making fun of people at their expense to amuse others is
> >> a legitimate enterprise.
>
> > Got teased all day every day as a child, did you? Both at school and at
> > home, probably.
>
> >> I think it's tacky and legally actionable.
>
> > You're a boogerhead. Now am I gonna see you in court, or are you a
> > coward and a liar?
>
> see what you did now, marqueenie
>
> --
WTF would you expect from
marqueer.........mopy,marqueer,LandQueer,JS........ETC:
RADIO RETARD FAGGOTS!

1129. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 17:43:26 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1188668606.837001.262500@o80g2000hse.googlegroups.com>
Source record: 36646

On 31 Aug, 17:58, John Smith <assemblywiz...@gmail.com> wrote:
> art wrote:
>
> > ...
>
> > Einstein hasbeenproven wrong many many times.
> > Einstein also did not produce the Gaussian array
> > since it would prove him wrong once again.
> > Haven't you got anything to contribute of a technical nature
> > other than following news from Minninapolis airport stalls ?
>
> Art:
>
> Actually, when I first came into this group, I was on Richards' A55 ...
>
> I changed my mind, he "encrypts" chit into his text which is not a first
> apparent ... check it out dude ...
>
> Regards,
> JS

John, I don't quite understand what you are saying......."encrypts
chits"
that is completely foreign to me. Are you saying wrapped in a enigma?
I have never really understood him so maybe I am missing something!
And that "A55" comment, don't understand that either.
Regards
Art

1130. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 17:45:09 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-B120EF.10450901092007@newsclstr02.news.prodigy.com>
Source record: 36647
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

In article <UvCdncJlyIko1U_bnZ2dnUVZ_u6rnZ2d@giganews.com>,
"Brenda Ann" <brendad@shinbiro.com> wrote:

> "John Navas" <spamfilter1@navasgroup.com> wrote in message
> news:spd4d39jcfqoeubml2ssc4pniml8kelgu4@4ax.com...

< Snip >

John Navas is a notorious Troll in many news groups. Please do not
respond to him in re.radio.shortwave.

--
Telamon
Ventura, California

1131. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 17:48:48 UTC
From: Telamon <telamon_spamshield@pacbell.net.is.invalid>
Message-ID: <telamon_spamshield-BB9E55.10484801092007@newsclstr02.news.prodigy.com>
Source record: 36648
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

```
In article <C2F7A083.75061%dbowey@comcast.net>,
Don Bowey <dbowey@comcast.net> wrote:

> On 8/26/07 7:15 PM, in article 0uc4d3dsknukqndksdgqltqrge7oumrp7a@4ax.com,
> "John Navas" <spamfilter1@navasgroup.com> wrote:
>
> > On Thu, 16 Aug 2007 06:52:55 -0700, Don Bowey <dbowey@comcast.net> wrote
> > in <C2E9A4C7.739F3%dbowey@comcast.net>:
> >
> >> On 8/15/07 11:07 PM, in article
> >> 0cq7c3def3f3rdpt56urvgf6c3ntekbk28@4ax.com,
> >> "John Navas" <spamfilter1@navasgroup.com> wrote:
> >>
> >>> On Thu, 19 Jul 2007 18:43:58 -0700, Don Bowey <dbowey@comcast.net> wrote
> >>> in <C2C5616E.700B1%dbowey@comcast.net>:
> >>>
> >>>> On 7/19/07 4:42 PM, in article
> >>>> 1mtv93ticddur8rq3tghsra57n9508mci0@4ax.com,
> >>>> "John Navas" <spamfilter1@navasgroup.com> wrote:
> >>>>
> >>>>> On Thu, 19 Jul 2007 14:45:00 GMT, jimp@specsol.spam.sux.com wrote in
> >>>>> <tp94n4-17l.ln1@mail.specsol.com>:
> >>>>>
> >>>>>> In rec.radio.amateur.antenna Radium <glucegen1@gmail.com> wrote:
> >>>>>
> >>>>>> Digital cell phones should stop using the compression they use and
> >>>>>> start using monaural WMA compression with a CBR of 20 kbps or less
> >>>>>> and
> >>>>>> a sample rate of at least 44.1 KHz. In addition, the following must
> >>>>>> also apply:
> >>>>>>
> >>>>>> The audio bandwidth of the phone system is about 3 KHz.
> >>>>>
> >>>>> Actually more like 10 KHz.
> >>>>
> >>>> If he is commenting on the bandwidth of a message network
> >>>> channel/circuit,
> >>>> including cellular, it is about 3 kHz.
> >>>
> >>> Audio. Suggest you read more carefully.
> >>
> >> Audio WHAT? Read what more carefully? Are you attempting to say the audio
```

> >> bandwidth of a message network channel is greater than about 3 kHz?
> >
> > No. Suggest you read more carefully.
>
> Suggest you kiss my ass.

I suggest you pay attention to the news groups to which you cross post.

< Plonk >

--
Telamon
Ventura, California

1132. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 17:56:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <023jd398dnvf5h8ad14b7e0ujck5a2ues3@4ax.com>
Source record: 36649

On Fri, 31 Aug 2007 20:43:42 -0400, "J. Mc Laughlin"
<jcm@power-net.net> wrote:

> I had the opportunity at Ohio State to craft a system that measured very
>wide BW noise that changed slowly and to add statistical measures to what
>was measured. Today, the task would be trivial - a sound card would run
>circles around what I did with a voltage to frequency converter,
>accumulator, counter-made-into-a-sidereal-clock, punched paper tape, and an
>IBM 1620.

Hi Mac,

Last night at dinner, I had a conversation with a former HP exec and
we rambled on over glasses of Burgundy about how kids had lost access
to "flipping bits" on the computer, and instead played on them. What
this has in regard to the quote above is that newer technology may
have made everything simpler, but the laborious route you took drew
together many issues and gave you a visceral connection to the
process, building an instinct so to speak.

For instance, your allusion to counter-made-into-a-sidereal-clock may
not be fully appreciated for its "sidereal" quality which is a specie
of time with a continuous slip against civil time. This would be a
source of constant irritation for one being tugged away from their
Cesium Beam Standard. (At a rate of something roughly at 4 minutes a
day?)

So in some sense the solution becoming "trivial" removes intuition
from the problem.

73's
Richard Clark, KB7QHC

1133. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 18:16:49 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <0dWdnXLH2LcKMUTbnZ2dnUVZ8qijnZ2d@bt.com>
Source record: 36651
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

"Radium" <glucegen1@gmail.com> wrote in message
news:1188620267.480204.139080@22g2000hsm.googlegroups.com...
> On Aug 30, 3:08 pm, "Mike Kaliski" <michael.kali...@tesco.net> wrote:
>> "Radium" <gluceg...@gmail.com> wrote in message
>>
>> news:1188510732.103951.83430@q5g2000prf.googlegroups.com...
>>
>>
>>
>> > Hi:
>>
>> > What is the highest radio frequency used for astronomy? Is it 3,438
>> > GHz?
>>
>> > According to the link below, it is 3,438 GHz:
>>
>> >http://books.nap.edu/openbook.php?record_id=11719&page=11
>>
>> > Is 3,438 GHz the highest radio frequency used for astronomy?
>>
>> > Thanks,
>>
>> > Radium
>>
>> Radium
>>
>> As the article suggests, higher frequencies are considered as being in
>> the
>> infra red wavelengths of light, so 3,438 GHz can be considered to be at
>> the
>> upper limits of radio frequency astronomy.
>>
>> Visible light, ultra violet light, x-rays and gamma rays are all
>> electromagnetic waves at higher frequencies and are also used for
>> astronomy
>> observations and experiments. Satellites are generally used to observe in
>> the ultra violet, x-ray and gamma ray spectrums as these wave lengths are
>> largely absorbed by the earth's atmosphere.
>>
>> Remember, there are no strict cut off frequencies where one type of
>> electromagnetic wave becomes another type. Radio merges into infra red
>> which
>> merges into visible light, ultra violet, x-rays and so on. Any limits are

>> purely arbitary ones applied by humans in order to categorise the way in
>> which electromagnetic waves of a certain frequency can be expected to
>> behave.
>>
>> Look at a colour palette. It is easy to pick out the primary colours.
>> Everyone who isn't colour blind can pick out red, blue, green, yellow
>> etc.
>> But where do you draw the line to decide where red becomes green, blue or
>> yellow? The colours slowly merge from one to another just as the
>> characteristics of radio waves change as frequency increases.
>>
>> Mike G0ULI
>
> Sorry, I meant to ask whether 3,438 GHz is the highest radio frequency
> used to receive audio signals from outer space. I should have made my
> question more specific. Radio-astronomers study sounds from the sun as
> well as visual data.
>
> I wonder if a space station with a 3,438 GHz AM receiver could pick up
> any extremely-distant audio signals between 20 to 20,000 Hz [from
> magnetars, gamma-ray-bursts, supernovae and other high-energy but
> cosmic objects] after demodulating the 3,438 GHz AM carrier wave.
>

Radium

You are referring to "the music of the spheres". The random noises generated by very distant quasars, galaxies, supernovae and other objects.

Yes it probably could and you would hear all sorts of weird pops, whistles and background noise. Just like at pretty much any other frequencies you care to monitor.

Mike G0ULI

1134. Re: Stake pocket antenna base

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 18:31:49 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <UfiCi.123924$xx1.72054@newsfe09.phx>
Source record: 36653
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

"Iitoi" <Iitoi@earthlink.net> wrote in message news:fbc45hdgg1@aioe.org...
> Putting HF into my Arizona Cadillac. I've seen, but can't find now, a
> mount for
> a Hustler (and similar) antennae which fits in a stake pocket on a pickup.
> Anyone point me to a source?
>
> The Man in the Maze
> QRL on Baboquivari Peak, AZ
>
> --
> Iitoi
>
>
>
These maybe
GeoTool Pickup Truck Stake Pocket Antenna Mounts
The strongest antenna mount made for pickup trucks!

http://www.geotool.com/antmount.htm

http://www.geotool.com/antmount.htm

Lamont

1135. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 18:31:56 UTC
From: Don Bowey <dbowey@comcast.net>
Message-ID: <C2FEFE2C.75AC3%dbowey@comcast.net>
Source record: 36652
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

```
On 9/1/07 10:48 AM, in article
telamon_spamshield-BB9E55.10484801092007@newsclstr02.news.prodigy.com,
"Telamon" <telamon_spamshield@pacbell.net.is.invalid> wrote:

> In article <C2F7A083.75061%dbowey@comcast.net>,
> Don Bowey <dbowey@comcast.net> wrote:
>
>> On 8/26/07 7:15 PM, in article 0uc4d3dsknukqndksdgqltqrge7oumrp7a@4ax.com,
>> "John Navas" <spamfilter1@navasgroup.com> wrote:
>>
>>> On Thu, 16 Aug 2007 06:52:55 -0700, Don Bowey <dbowey@comcast.net> wrote
>>> in <C2E9A4C7.739F3%dbowey@comcast.net>:
>>>
>>>> On 8/15/07 11:07 PM, in article
>>>> 0cq7c3def3f3rdpt56urvgf6c3ntekbk28@4ax.com,
>>>> "John Navas" <spamfilter1@navasgroup.com> wrote:
>>>>
>>>>> On Thu, 19 Jul 2007 18:43:58 -0700, Don Bowey <dbowey@comcast.net> wrote
>>>>> in <C2C5616E.700B1%dbowey@comcast.net>:
>>>>>
>>>>>> On 7/19/07 4:42 PM, in article
>>>>>> 1mtv93ticddur8rq3tghsra57n9508mci0@4ax.com,
>>>>>> "John Navas" <spamfilter1@navasgroup.com> wrote:
>>>>>>
>>>>>>> On Thu, 19 Jul 2007 14:45:00 GMT, jimp@specsol.spam.sux.com wrote in
>>>>>>> <tp94n4-17l.ln1@mail.specsol.com>:
>>>>>>>
>>>>>>>> In rec.radio.amateur.antenna Radium <glucegen1@gmail.com> wrote:
>>>>>>>
>>>>>>>> Digital cell phones should stop using the compression they use and
>>>>>>>> start using monaural WMA compression with a CBR of 20 kbps or less
>>>>>>>> and
>>>>>>>> a sample rate of at least 44.1 KHz. In addition, the following must
>>>>>>>> also apply:
>>>>>>>>
>>>>>>>> The audio bandwidth of the phone system is about 3 KHz.
>>>>>>>
>>>>>>> Actually more like 10 KHz.
>>>>>>
>>>>>> If he is commenting on the bandwidth of a message network
>>>>>> channel/circuit,
>>>>>> including cellular, it is about 3 kHz.
```

>>>>>
>>>>> Audio. Suggest you read more carefully.
>>>>
>>>> Audio WHAT? Read what more carefully? Are you attempting to say the audio
>>>> bandwidth of a message network channel is greater than about 3 kHz?
>>>
>>> No. Suggest you read more carefully.
>>
>> Suggest you kiss my ass.
>
> I suggest you pay attention to the news groups to which you cross post.
>
> < Plonk >

Idiot. The reply goes to whatever distribution was set on the posted
message. Plonk yourself, Troll.

1136. Re: Stake pocket antenna base

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 19:26:58 UTC
From: Iitoi <Iitoi@earthlink.net>
Message-ID: <fbcee3$u2r$1@aioe.org>
Source record: 36654
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

"The Shadow" <Cranston@CobaltClub.com> wrote in message
news:UfiCi.123924$xx1.72054@newsfe09.phx...

> These maybe
> GeoTool Pickup Truck Stake Pocket Antenna Mounts
> The strongest antenna mount made for pickup trucks!
>
> http://www.geotool.com/antmount.htm
>
> http://www.geotool.com/antmount.htm
>
> Lamont

Looks perfect. Thanks!

The Man in the Maze
QRL on Baboquivari Peak, AZ

--
Iitoi

1137. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 19:40:03 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1188675603.991212.108440@y42g2000hsy.googlegroups.com>
Source record: 36655
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

On Sep 1, 10:45 am, Telamon
<telamon_spamshi...@pacbell.net.is.invalid> wrote:
> In article <UvCdncJlyIko1U_bnZ2dnUVZ_u6rn...@giganews.com>,
> "Brenda Ann" <bren...@shinbiro.com> wrote:
>
> > "John Navas" <spamfilt...@navasgroup.com> wrote in message
> >news:spd4d39jcfqoeubml2ssc4pniml8kelgu4@4ax.com...
>
> < Snip >
>

- John Navas is a notorious Troll in many news groups.
- Please do not respond to him in re.radio.shortwave.
-
- --
- Telamon
- Ventura, California

Telamon - Was 'that' an Oops ? ;-}
{Please do not respond to him in re.radio.shortwave.}

DOH ! - Oops It Was For Me Too ! :o) ~ RHF
.
.
. .

1138. 2 weeks until Western Connecticut Hamfest

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 19:41:20 UTC
From: JimR <kd1yv6@notmyemail.com>
Message-ID: <0sroq4-o46.ln1@oneyv.dyndns.org>
Source record: 36659

WESTERN CONNECTICUT HAMFEST
Sponsored by: Candlewood Amateur Radio Association - CARA

Sunday, September 16, 2007
Table Set-up at 7:00 AM.
Open to the public 8:30 AM to 12:30 PM

Edmond Town Hall, 45 Main St. (Route 25), Newtown, CT Exit 10 off of I-84

Admission $5.00, Kids Under 12 FREE.
Tables $12.50 Tailgating $8.00. (Both INCLUDE 1 admission).

ARRL Sanctioned. Talk-in on 147.300 (+) PL 100.0.

Seminars
- Mechanical TV – Those were the days
- Airmail – How it works, incl demo
- Satellite Communications – How to do it
- NVIS Antennas (courtesy of ARRL)Handicapped Access. Ham Radio Equipment.
Batteries for Emergency Comms. Computers. Door Prizes.
Refreshments. Ample Parking. Rain or shine.

Only 12 minutes from Brewster, NY, 15 minutes from Waterbury, CT.

For information
call: (203) 938 4880 or (203) 775 1946

---------- Table Reservation ----------
Mail to: Candlewood Amateur Radio Association
c/o Joe deGroot, AB1DO,
30 Sunnyview Drive,
Redding, CT 06896

Name:_____
Address:_____
City/State:_____

Please reserve _____ tables at $10.00 each.
Yes / No : I need electricity

Make checks payable to CARA

1139. Re: A more rational approach -- how I would like to change the cell phone industry.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 19:50:34 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1188676234.085518.301540@r29g2000hsg.googlegroups.com>
Source record: 36656
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna,alt.cellular.cingular,alt.internet.wireless

```
On Sep 1, 10:48 am, Telamon
<telamon_spamshi...@pacbell.net.is.invalid> wrote:
> In article <C2F7A083.75061%dbo...@comcast.net>,
> Don Bowey <dbo...@comcast.net> wrote:
>
>
>
>
>
> > On 8/26/07 7:15 PM, in article 0uc4d3dsknukqndksdgqltqrge7oumr...@4ax.com,
> > "John Navas" <spamfilt...@navasgroup.com> wrote:
>
> > > On Thu, 16 Aug 2007 06:52:55 -0700, Don Bowey <dbo...@comcast.net> wrote
> > > in <C2E9A4C7.739F3%dbo...@comcast.net>:
>
> > >> On 8/15/07 11:07 PM, in article
> > >> 0cq7c3def3f3rdpt56urvgf6c3ntekb...@4ax.com,
> > >> "John Navas" <spamfilt...@navasgroup.com> wrote:
>
> > >>> On Thu, 19 Jul 2007 18:43:58 -0700, Don Bowey <dbo...@comcast.net> wrote
> > >>> in <C2C5616E.700B1%dbo...@comcast.net>:
>
> > >>>> On 7/19/07 4:42 PM, in article
> > >>>> 1mtv93ticddur8rq3tghsra57n9508m...@4ax.com,
> > >>>> "John Navas" <spamfilt...@navasgroup.com> wrote:
>
> > >>>>> On Thu, 19 Jul 2007 14:45:00 GMT, j...@specsol.spam.sux.com wrote in
> > >>>>> <tp94n4-17l....@mail.specsol.com>:
>
> > >>>>>> In rec.radio.amateur.antenna Radium <gluceg...@gmail.com> wrote:
>
> > >>>>>>> Digital cell phones should stop using the compression they use and
> > >>>>>>> start using monaural WMA compression with a CBR of 20 kbps or less
> > >>>>>>> and
> > >>>>>>> a sample rate of at least 44.1 KHz. In addition, the following must
> > >>>>>>> also apply:
>
> > >>>>>> The audio bandwidth of the phone system is about 3 KHz.
>
> > >>>>> Actually more like 10 KHz.
>
> > >>>> If he is commenting on the bandwidth of a message network
```

> > >>>> channel/circuit,
> > >>>> including cellular, it is about 3 kHz.
>
> > >>> Audio. Suggest you read more carefully.
>
> > >> Audio WHAT? Read what more carefully? Are you attempting to say the audio
> > >> bandwidth of a message network channel is greater than about 3 kHz?
>
> > > No. Suggest you read more carefully.
>
> > Suggest you kiss my ass.
>

- I suggest you pay attention to the news groups to which you cross
post.
-
- < Plonk >
-
- --
- Telamon
- Ventura, California

Telamon - Was 'that' an Oops ? ;-}

{ I suggest you pay attention to the
news groups to which you cross post.}

sci.electronics.basics, rec.radio.shortwave,
rec.radio.amateur.antenna, alt.cellular.cingular,
alt.internet.wireless

DOH ! - Oops It Was For Me Too ! :o) ~ RHF
.
plink, plink, plink,
.
Plank. Plank. Plank.
.
P L O N K ! - P L O N K ! - P L O N K !
.
plonk me if i haven't plonked myself again . . .
.
.
. .

1140. (OT) : "What is the Highest Radio Frequency used for Shortwave {High Frequency) Radio ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 20:03:29 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1188677009.894557.70890@19g2000hsx.googlegroups.com>
Source record: 36657
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On Sep 1, 8:44 am, msg <msg@_cybertheque.org_> wrote:
> Radium wrote:
>
> > Sorry, I meant to ask whether 3,438 GHz is the highest radio frequency
> > used to receive audio signals from outer space.
>
> I thought perhaps the O.P. was from Europe or the U.K. and that the
> comma in the above numeric was a substitution for a decimal point, but
> alas the posting IP is from So. Cal. ....
>
> Regards,
>
> Michael

Hello Off-Topic "Radium-Lite" Cross-Posters,

Since "Radium" Posted this Question to several Newsgroups
and the Topic is a Non-Shortwave Radio Question that is being
Cross-Posted to the Rec.Radio.Shortwave Newsgroup :

Let me 'morph' this Question so that it is something related
to Shortwave Radio.

"What is the Highest Radio Frequency used for Shortwave {High
Frequency) Radio ?

i want to know -cause- i have been 'radiumized' ~ RHF
.
.
. .

1141. (OT) : "What is the Highest Radio Frequency used for Shortwave {High Frequency) Radio ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 20:04:44 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1188677084.594969.116760@57g2000hsv.googlegroups.com>
Source record: 36658
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On Sep 1, 11:16 am, "Mike Kaliski" <michael.kali...@tesco.net> wrote:
> "Radium" <gluceg...@gmail.com> wrote in message
>
> news:1188620267.480204.139080@22g2000hsm.googlegroups.com...
>
>
>
>
>
> > On Aug 30, 3:08 pm, "Mike Kaliski" <michael.kali...@tesco.net> wrote:
> >> "Radium" <gluceg...@gmail.com> wrote in message
> >
> >>news:1188510732.103951.83430@q5g2000prf.googlegroups.com...
> >
> >> > Hi:
> >
> >> > What is the highest radio frequency used for astronomy? Is it 3,438
> >> > GHz?
> >
> >> > According to the link below, it is 3,438 GHz:
> >
> >> >http://books.nap.edu/openbook.php?record_id=11719&page=11
> >
> >> > Is 3,438 GHz the highest radio frequency used for astronomy?
> >
> >> > Thanks,
> >
> >> > Radium
> >
> >> Radium
> >
> >> As the article suggests, higher frequencies are considered as being in
> >> the
> >> infra red wavelengths of light, so 3,438 GHz can be considered to be at
> >> the
> >> upper limits of radio frequency astronomy.
> >
> >> Visible light, ultra violet light, x-rays and gamma rays are all
> >> electromagnetic waves at higher frequencies and are also used for
> >> astronomy
> >> observations and experiments. Satellites are generally used to observe in
> >> the ultra violet, x-ray and gamma ray spectrums as these wave lengths are

> >> largely absorbed by the earth's atmosphere.
>
> >> Remember, there are no strict cut off frequencies where one type of
> >> electromagnetic wave becomes another type. Radio merges into infra red
> >> which
> >> merges into visible light, ultra violet, x-rays and so on. Any limits are
> >> purely arbitary ones applied by humans in order to categorise the way in
> >> which electromagnetic waves of a certain frequency can be expected to
> >> behave.
>
> >> Look at a colour palette. It is easy to pick out the primary colours.
> >> Everyone who isn't colour blind can pick out red, blue, green, yellow
> >> etc.
> >> But where do you draw the line to decide where red becomes green, blue or
> >> yellow? The colours slowly merge from one to another just as the
> >> characteristics of radio waves change as frequency increases.
>
> >> Mike G0ULI
>
> > Sorry, I meant to ask whether 3,438 GHz is the highest radio frequency
> > used to receive audio signals from outer space. I should have made my
> > question more specific. Radio-astronomers study sounds from the sun as
> > well as visual data.
>
> > I wonder if a space station with a 3,438 GHz AM receiver could pick up
> > any extremely-distant audio signals between 20 to 20,000 Hz [from
> > magnetars, gamma-ray-bursts, supernovae and other high-energy but
> > cosmic objects] after demodulating the 3,438 GHz AM carrier wave.
>
> Radium
>
> You are referring to "the music of the spheres". The random noises generated
> by very distant quasars, galaxies, supernovae and other objects.
>
> Yes it probably could and you would hear all sorts of weird pops, whistles
> and background noise. Just like at pretty much any other frequencies you
> care to monitor.
>
> Mike G0ULI- Hide quoted text -
>
> - Show quoted text -

Hello Off-Topic "Radium-Lite" Cross-Posters,

Since "Radium" Posted this Question to several Newsgroups
and the Topic is a Non-Shortwave Radio Question that is being
Cross-Posted to the Rec.Radio.Shortwave Newsgroup :

Let me 'morph' this Question so that it is something related
to Shortwave Radio.

"What is the Highest Radio Frequency used for Shortwave
{High Frequency) Radio ?

i want to know -cause- i have been 'radiumized' ~ RHF
.
.
. .

1142. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 20:14:43 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <sdajd31ipa7vevtk1q58dbmmeu02opeqc1@4ax.com>
Source record: 36660

On Sat, 01 Sep 2007 06:00:46 -0700, Denny <k8do@mailblocks.com> wrote:

>Uhhh, gawd, I hate to even get into THIS mess... But, somebody has
>gotta do it...

Hi Denny,

Well, for such a melodramatic dip of your toe into this cesspool, I
hope you brought your snorkel.

>First guys, photons hitting the blades of the radiometer do not turn
>it by F=MA...

Um, given the number of radiometers available, as your first attempt
at this water-polo at least name the one you are responding to.

>If it did <were we so lucky> then NASA is wasting a
>hell of a lot of money designing the mars rockets when all they have
>to do is have the space shuttle throw out a sail

Odd you should so quickly discard one of their proposed interplanetary
spacecraft with a rhetorical flick of the wrist.

>and have their heads
>snap back as they are accellerated like a half drunk blond hitting the
>gas pedal in a red corvette...

It doesn't work that way and certainly reveals the chasm between the
mechanics and the mechanism of the motive power. Your assertion
doesn't even work in the Newtonian universe.

>Actually, the radiometer blades turn because infrared energy
>differentially heats the black surface of the blade as opposed to the
>silver surface, causing it to differentially heat the local air
>molecules on that side of the blade as opposed to the silver side...
>The more energetic bombardment of the black surace by the heated
>molecules as opposed to the less energetic bombardment on the silver
>surface causes a differential in pressure that pushes the blade on its
>way...

Not quite. This was certainly "one" answer, but the numbers don't add
up. It also reveals Tom's bushwhack of the twins when he evacuated
the Crookes radiometer.

The description you offer requires a porous plate which is absent in
every radiometer that has come down the pike (and yet still twist in
the sun to confound the math). As for the local air, there is none in
many radiometers that are more sensitive than the Crookes.

>(no Virginia, that is not a vacuum inside the radiometer, just high
>altitude - and yes there is no Santa Claus - now come over here and
>sit on my lap)

Again, which radiometer? If you are arguing a "perfect" vacuum, then like a free lunch, I would agree there's no such thing. The Crookes radiometer requires a partial atmosphere to work, other radiometers work quite fine with much less.

The distinction in the multiplicity of radiometers is significant and relates to an effect predicted in Maxwell's work, and exhibited by Lebedev; and Nichols, Tear, Hull, and Webb by THEIR radiometers. It requires very little more work than stating the surface area and rendering the expression of force in the units pascals if one wishes to remain within their classical descriptions.

To put a number to it: 0.3 slug per sq. mile (under less than demanding conditions)

If the twins can't cope with the crippling Newtonian math, then one might grant them the mental prowess of scaling by area - something within the reach of a very special fifth grader. Yet and all, this bone that I am tossing them only answers the less than Extra special, super duper credit question.

To keep it in pascals in conditions of sunlight, on the equator, at noon, on the solstice: 3 ï¿½Pa (one square meter is implied, but this is certainly not the size of any radiometer's vane - hence this number should be further reduced by roughly 1/10,000 or 300 pPa). If the twins can follow the mathematical progression in the parenthetical statement, they should be able to answer the less than Extra special, super duper credit question.

Mass of a Photon indeed! If, at that time, Newton had these stellar acolytes surrounding him (a lot of his work on the speed of sound was jimmied to amaze his audience), he would have had to been hit with a vat of applesauce to discover gravity.

73's
Richard Clark, KB7QHC

1143. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 20:17:08 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1188677828.718777.162400@57g2000hsv.googlegroups.com>
Source record: 36661

On Sep 1, 6:00 am, Denny <k...@mailblocks.com> wrote:
> On Aug 31, 3:36 pm, Richard Clark <kb7...@comcast.net> wrote:
>
>
>
> > On Fri, 31 Aug 2007 12:20:50 -0700, John Smith
>
> > <assemblywiz...@gmail.com> wrote:
> > > What do you think turns those vanes--if it
> > >ain't the "mass" of photons striking the plates?
>
> > Hmm, dare anyone ask either of you for a simple computation to support
> > this notion of "mass?"
>
> > If Arthur is so wedded to a Newtonian universe, it should be a walk in
> > the apple orchard.
>
> > A very simple question of rotational kinematics:
> > How much power is required to accelerate
> > the 1 gram mass of the vanes
> > from 0cM/s to 1cM/s in 10s?
>
> > Extra credit:
> > How many photons does it take to do this?
>
> > Extra special, super duper credit:
> > What is the weight of one of those photons?
>
> > You can use your calculator to convert mass to slugs in an Earth
> > environment. Of course, this may be an egregious speculation of
> > ability if the prior compuations are begged (or whined) off with
> > extraneous demands (not worth Newton's spit) for parsing F=MA.
>
> > 73's
> > Richard Clark, KB7QHC
>
> Uhhh, gawd, I hate to even get into THIS mess... But, somebody has
> gotta do it...
>
> First guys, photons hitting the blades of the radiometer do not turn
> it by F=MA... If it did <were we so lucky> then NASA is wasting a
> hell of a lot of money designing the mars rockets when all they have
> to do is have the space shuttle throw out a sail and have their heads
> snap back as they are accellerated like a half drunk blond hitting the

> gas pedal in a red corvette...
> Actually, the radiometer blades turn because infrared energy
> differentially heats the black surface of the blade as opposed to the
> silver surface, causing it to differentially heat the local air
> molecules on that side of the blade as opposed to the silver side...
> The more energetic bombardment of the black surace by the heated
> molecules as opposed to the less energetic bombardment on the silver
> surface causes a differential in pressure that pushes the blade on its
> way...
> (no Virginia, that is not a vacuum inside the radiometer, just high
> altitude - and yes there is no Santa Claus - now come over here and
> sit on my lap)
>
> denny

Thanks, Denny. Actually, it's not _quite_ that simple, but you're on
the right track at least.

Cheers,
Tom

1144. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 21:19:01 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <qkkjd3thd625s5hc36d6jiecr8v0eeu78h@4ax.com>
Source record: 36662
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On Sat, 01 Sep 2007 10:44:45 -0500, msg <msg@_cybertheque.org_>
wrote:

>Radium wrote:
>
>>
>>
>> Sorry, I meant to ask whether 3,438 GHz is the highest radio frequency
>> used to receive audio signals from outer space.
>
>I thought perhaps the O.P. was from Europe or the U.K. and that the
>comma in the above numeric was a substitution for a decimal point, but
>alas the posting IP is from So. Cal. ....

Indeed.

This "Radium" personage seems to be no more than a troll who could
answer his own questions by querying the available literature, but
who seems intent on wasting others' time by posting idiocy which
must be refuted.

--
JF

1145. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-01 23:53:32 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1188690812.353096.245770@w3g2000hsg.googlegroups.com>
Source record: 36663

Well, when you guys have 'the' proof that differential partial
pressure is not the motor, let me know... Till then, that's my story
an I'm stickin to it..
cheers ... denny

1146. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 00:30:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbd069pur1@news.albasani.net>
Source record: 36664

Denny wrote:

> ...
> gas pedal in a red corvette...
> Actually, the radiometer blades turn because infrared energy
> differentially heats the black surface of the blade as opposed to the
> silver surface, causing it to differentially heat the local air
> molecules on that side of the blade as opposed to the silver side...
> The more energetic bombardment of the black surace by the heated
> molecules as opposed to the less energetic bombardment on the silver
> surface causes a differential in pressure that pushes the blade on its
> way...
> (no Virginia, that is not a vacuum inside the radiometer, just high
> altitude - and yes there is no Santa Claus - now come over here and
> sit on my lap)
>
> denny
>

Really? So, someone should tell the engineers who have proposed the "solar sail?" A massive silvered mylar sail which would be unfolded in space and sail spacecraft on the "solar winds", photons reflected mass--actually.

You guys missed your calling ... you could have been "fact debunkers!"

Regards,
JS

1147. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 00:51:22 UTC
From: Al in Dallas <alfargnoli@yahoo.com>
Message-ID: <l72kd3h51ljcuk65asq4n04euev2c1551k@4ax.com>
Source record: 36665
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On Thu, 30 Aug 2007 18:24:40 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Dave Platt wrote:
>
> > ...
>> I do know that there have been some very interesting experiments with
>> nanotechnology, over the past couple of years, in which tiny carbon
>> nanotubes have been used as optical-frequency antennas.
>>
>> http://www.nanowerk.com/spotlight/spotid=1442.php has a brief writeup
>> on one such.
>>
>
>Let's hope, super cheap, super efficient solar panels would be great!
>Bye, bye power company ...

I think you need to consider how many watts of sunlight fall on an
acre.

--
Al in St. Lou

1148. making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 02:34:24 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns999EC71DC1256HuckleberryREMOVEbig@198.186.192.196>
Source record: 36666

I am having a heck of a time locating a source of good information on how to make an effective common mode filter using the snap-on type ferrite beads such as available at RAdio Shack. Planned usage is for RG-8 coax feeding an SGC tuner, with primary operation on 75 & 40 Meters, but possibly up through 10M. Any help?

Ed K7AAT

1149. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 02:49:59 UTC
From: "Eric F. Richards" <efricha@dim.com>
Message-ID: <119kd3lvv6l84c73s3q6oi1kvvtsq8lmo9@4ax.com>
Source record: 36668
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

Al in Dallas <alfargnoli@yahoo.com> wrote:

> On Thu, 30 Aug 2007 18:24:40 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
> >Dave Platt wrote:
> >
> > > ...
> >> I do know that there have been some very interesting experiments with
> >> nanotechnology, over the past couple of years, in which tiny carbon
> >> nanotubes have been used as optical-frequency antennas.
> >>
> >> http://www.nanowerk.com/spotlight/spotid=1442.php has a brief writeup
> >> on one such.
> >>
> >
> >Let's hope, super cheap, super efficient solar panels would be great!
> >Bye, bye power company ...
>
> I think you need to consider how many watts of sunlight fall on an
> acre.

Since people who say things like that don't bother to actually know
how to calculate the answer to that, the recoverable solar energy per
acre is 5.25 MW.

If your solar collection is only 10% efficient -- far below what is
common today -- you'd still get 525 kW / acre.

Since covering land with solar panels is not necessarily the best or
most aesthetic or most socially acceptible use of land, consider what
could be done with south-facing rooftops and solar shingles like those
made by http://www.uni-solar.com/

--
Eric F. Richards
efricha@dim.com
"Don't destroy the Earth! That's where I keep all of my stuff!"
- Squidd on www.fark.com

1150. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 02:50:09 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <UvCdneHXbNgquUfbnZ2dnUVZ_rKtnZ2d@bright.net>
Source record: 36667

Dear Richard:

Outstanding insight. Too often the big picture occludes the necessary, component, little pictures, and the other way round is just as common.

Two other items about that long ago task might be instructional: One:
I expressed to Prof. Kraus that the outside world expected measures of the uncertainties in what we were doing - indeed, as I recall, a polite and careful criticism had been published. How I had the ability to suggest to a world class scientist that his work could be better is a mystery still. It just seemed like the right thing to do - two Midwesterners talking about what had to be done. I further opined that continuing to measure off of the scratching on pen recorders was not up to the task. Prof. Kraus said: "do it, I have money for bits and pieces." Things like this do not happen any more. So, not realizing that such a scheme had not been dome, off I went to do it. Mind, RS232 did not exist. IEEE488 did not exist. Instruments did not talk to each other in those days. At the end, just the clock and counter/accumulator needed to talk binary to the punch-paper tape drive. The IBM1620 did arithmetic by table-look-up! So the programming was entirely different than anything I ever did again.

Two: The sidereal clock was crafted from an HP counter that used relaxation oscillators as frequency dividers with a reference oscillator shifted up by the slight amount required. Got the thing to read HMS, but the time was off by exactly 1%. I used a scheme that I had made from a BC221 "frequency meter" as a transfer reference to measure the counter's reference oscillator (topic for another day as it involved some interesting math and electronics) and it was right on the money. Well, one of the relaxation oscillators was dividing by 9 and one by 11!
The real story that illustrates characteristics to be avoided by every generation took place when visiting the observatory of a large European country we have not had a war with: they wished to convert a digital clock from civil time to sidereal time, but were such bureaucrats that they were unwilling to process an order to change the reference oscillator! So, I proceeded to describe in detail how one etches a crystal. What they said, in effect, was: "get our hands dirty and take a chance of damaging state property?" As has been said many time by this group: the time arrives when one needs to up and do.

Back from the ramble of an old man to your observations: science and intuition must be coupled. Our younger people have far fewer opportunities to acquire experience that can lead to intuition. The scheme of working half time and going to school half time is one way to overcome those limitations. That is what our school has done since 1919 - no, I was not present at the opening.

73, Mac N8TT
--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:023jd398dnvf5h8ad14b7e0ujck5a2ues3@4ax.com...
> On Fri, 31 Aug 2007 20:43:42 -0400, "J. Mc Laughlin"
> <jcm@power-net.net> wrote:
>
> > I had the opportunity at Ohio State to craft a system that measured
very
> >wide BW noise that changed slowly and to add statistical measures to what
> >was measured. Today, the task would be trivial - a sound card would run
> >circles around what I did with a voltage to frequency converter,
> >accumulator, counter-made-into-a-sidereal-clock, punched paper tape, and
an
> >IBM 1620.
>
> Hi Mac,
>
> Last night at dinner, I had a conversation with a former HP exec and
> we rambled on over glasses of Burgundy about how kids had lost access
> to "flipping bits" on the computer, and instead played on them. What
> this has in regard to the quote above is that newer technology may
> have made everything simpler, but the laborious route you took drew
> together many issues and gave you a visceral connection to the
> process, building an instinct so to speak.
>
> For instance, your allusion to counter-made-into-a-sidereal-clock may
> not be fully appreciated for its "sidereal" quality which is a specie
> of time with a continuous slip against civil time. This would be a
> source of constant irritation for one being tugged away from their
> Cesium Beam Standard. (At a rate of something roughly at 4 minutes a
> day?)
>
> So in some sense the solution becoming "trivial" removes intuition
> from the problem.
>
> 73's
> Richard Clark, KB7QHC

1151. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 02:55:12 UTC
From: Paul <null@null.null>
Message-ID: <46da25d6$0$14116$742ec2ed@news.sonic.net>
Source record: 36669

"Ed G" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns999EC71DC1256HuckleberryREMOVEbig@198.186.192.196...
>
> I am having a heck of a time locating a source of good information on
> how to make an effective common mode filter using the snap-on type ferrite
> beads such as available at RAdio Shack. Planned usage is for RG-8 coax
> feeding an SGC tuner, with primary operation on 75 & 40 Meters, but
> possibly up through 10M. Any help?
>
>
> Ed K7AAT

K6MHE posted this link a little while ago:
http://audiosystemsgroup.com/RFI-Ham.pdf

It is a *really* good treatment of baluns, chokes, and ferrite material,
with both theory and some practical examples.

-Paul, wb6cxc

1152. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 02:56:02 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns999F838BDAA7Enonenowhere@61.9.191.5>
Source record: 36670

Ed G <Huckleberry_REMOVE_@bigvalley.net> wrote in
news:Xns999EC71DC1256HuckleberryREMOVEbig@198.186.192.196:

>
> I am having a heck of a time locating a source of good information
> on
> how to make an effective common mode filter using the snap-on type
> ferrite beads such as available at RAdio Shack. Planned usage is for
> RG-8 coax feeding an SGC tuner, with primary operation on 75 & 40
> Meters, but possibly up through 10M. Any help?
>
>
> Ed K7AAT
>

Does that imply that you are going to put the suppression sleeves on the
coax, but not on the power / control cable?

Owen

1153. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 03:37:03 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns999ED1BD9326EHuckleberryREMOVEbig@198.186.192.196>
Source record: 36671

Owen Duffy <none@no.where> wrote in news:Xns999F838BDAA7Enonenowhere@
61.9.191.5:

> Ed G <Huckleberry_REMOVE_@bigvalley.net> wrote in
> news:Xns999EC71DC1256HuckleberryREMOVEbig@198.186.192.196:
>
>>
>> I am having a heck of a time locating a source of good information
>> on
>> how to make an effective common mode filter using the snap-on type
>> ferrite beads such as available at RAdio Shack. Planned usage is for
>> RG-8 coax feeding an SGC tuner, with primary operation on 75 & 40
>> Meters, but possibly up through 10M. Any help?
>>
>>
>> Ed K7AAT
>>
>
> Does that imply that you are going to put the suppression sleeves on
the
> coax, but not on the power / control cable?
>
> Owen
>

Point taken.... although power may be locally supplied by 12V
battery. Or, if using separate 12VDC line, could route alongside RG8 and
use the common mode filter over both? No control cable needed.

Ed K7AAT

1154. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 03:44:50 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1188704690.950736.204180@g4g2000hsf.googlegroups.com>
Source record: 36672

On Sep 1, 4:53 pm, Denny <k...@mailblocks.com> wrote:
> Well, when you guys have 'the' proof that differential partial
> pressure is not the motor, let me know... Till then, that's my story
> an I'm stickin to it..
> cheers ... denny

Sent via email...

Cheers,
Tom

1155. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 03:52:20 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns999ED4551B579HuckleberryREMOVEbig@198.186.192.196>
Source record: 36673

> K6MHE posted this link a little while ago:
> http://audiosystemsgroup.com/RFI-Ham.pdf
>
> It is a *really* good treatment of baluns, chokes, and ferrite
> material, with both theory and some practical examples.
>
> -Paul, wb6cxc
>
>

Thanks, Paul. That IS a really good run down on common mode filter design, etc. I was "hoping" for a simple how-to using the Radio Shack snap-on beads. I have about a dozen of that type. After a quick read, I believe there was some pertinent info in that writeup specific to what I want to use. I suppose I can simply install a half dozen and see how it works. One antenna system is a 23' vertical on the back of my motorhome, the feed point ground is well bonded to the large chassis underneath, and fed with RG8X. Although base loaded at present, I will Probably end up feeding it with an SGC auto tuner. The other antenna will be a dipole of some sort, fed with ladder line and tuned with another SGC tuner. The common mode filter will go on the coax at the tuner input.

Ed K7AAT

1156. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 05:09:58 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <O7adnTrJfoE52kfbnZ2dnUVZ_uejnZ2d@giganews.com>
Source record: 36674

Ed G wrote:
>
> I am having a heck of a time locating a source of good information on
> how to make an effective common mode filter using the snap-on type ferrite
> beads such as available at RAdio Shack. Planned usage is for RG-8 coax
> feeding an SGC tuner, with primary operation on 75 & 40 Meters, but
> possibly up through 10M. Any help?
>
>
> Ed K7AAT

http://www.yccc.org/Articles/W1HIS/CommonModeChokesW1HIS2006Apr06.pdf makes reference to the RS snap-on ferrites being mix 43 (page 25):

"One 'turn' on (i.e., one pass through) a Fair-Rite mix-43, splitbead, 'Cable Snap-itT ' about 1.25 inch long by about 3/4 inch square, able to fit around a cable of diameter up to 1/4 inch. Radio Shack sells these, and many are found at hamfests.
Freq.(MHz) / Z(ohms)
3.5 / 40
14 / 115
28 / 171
There is no angle data here; but note that the variation of Z as a function of f here is similar to that seen above for the string of mix-43 toroids."

Using that info, you'd stack ferrites in order to achieve the impedance you're seeking. At 80m, if you want 400 ohms, you'd use 10 of them. However, I believe it'd be cheaper to stack ordinary ferrite toroids such as Amidon FT82-43 (u=850, AL = 557mH/1000T, 0.516" ID). With these, 400 ohms at 3.5 MHz = 18.2 uH. At 557mH/1000T and one turn per core, you'd use 5.68 cores (round up to 6 cores). Amidon sells 'em for $1.20 ea

Bryan WA7PRC

1157. Re: Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 05:27:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ncikd39ri740jm058laf30sh3dbu98207q@4ax.com>
Source record: 36675

On Sat, 1 Sep 2007 22:50:09 -0400, "J. Mc Laughlin"
<jcm@power-net.net> wrote:

>The scheme of working
>half time and going to school half time is one way to overcome those
>limitations.

Hi Mac,

Sounds like a good plan - got to avoid sudden transitions or spurs
will fill the spectrum.

73's
Richard Clark, KB7QHC

1158. Re: Repairing A Broken Trap?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 05:53:24 UTC
From: Clayton <Evans8119@aol.com>
Message-ID: <1188712404.580447.304240@d55g2000hsg.googlegroups.com>
Source record: 36676

Thanks Guys
I forgot all about the Boiler Works here. I checked with them and they
will have some in next week.

I Appreciate the help

1159. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 05:54:23 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <fesCi.3754$z_5.2300@nlpi069.nbdc.sbc.com>
Source record: 36677

Ed G wrote:
> I am having a heck of a time locating a source of good information on
> how to make an effective common mode filter using the snap-on type ferrite
> beads such as available at RAdio Shack.

Someone needs to characterize those beads.
What is the one-turn choking impedance at
10 MHz?
--
73, Cecil http://www.w5dxp.com

1160. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 07:29:09 UTC
From: Jasen Betts <jasen@free.net.nz>
Message-ID: <fbdoo5rag1@jasen.is-a-geek.org>
Source record: 36678
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On 2007-08-30, Tam/WB2TT <t-tammaru@c0mca$t.net> wrote:

> I am curious here. At some point you have to switch from metallic conductors
> and antennas to lenses and other optics. Any idea what the highest frequency
> RF amplifier works at?

I've heard of X-ray lasers.

Bye.
Jasen

1161. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 14:31:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbehf5rfj1@news.albasani.net>
Source record: 36679

art wrote:

> ...
> Come on John Study Gauss and all becomes clear
> Art
>

Clear?

Hmmm. Sure you don't strive to over simplify a bit? But, ok. When I lay down a bar neodymium magnet, cover it with a sheet of paper and sprinkle iron powder upon it, to see the lines of force--what are those lines depicting? Are those photons? Are those waves? Are you completely sure they are only of static properties--and some type of movement is not occurring just outside my range of vision and ability to measure? Are they contained within a media I cannot see and measure?

It is quite easy for me to generate those same lines of force with an electric energies' flow though a conductor. And, the reverse is also easy to accomplish, I can cause an electric energy to be generated by moving a conductor though these lines of force.

I suspect, in the future, it will be easy to switch matter and energies' states back in forth, with similar ease.

But, at this point, clear? Surely your vision is much better than my own ...

And, if I am unable to get my mind completely wrapped around this problem, to be able to claim I understand this with precision--how would I suddenly be able to make claims about the much more complex?

But, if you have the time, enlighten me, what is gravities relationship to magnetism? Is there a reason their properties share similar characteristics/behaviors? Know of any "iron powder tricks" to allow me to see gravities lines of force?

I think gauss is a link in a chain--not a complete answer in itself, and a chain which is still missing links ...

Regards,
JS

1162. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 15:56:48 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1188748608.995863.91870@w3g2000hsg.googlegroups.com>
Source record: 36680

On 2 Sep, 07:31, John Smith <assemblywiz...@gmail.com> wrote:
> art wrote:
>
> > ...
>
> > Come on John Study Gauss and all becomes clear
> > Art
>
> Clear?
>
> Hmmm. Sure you don't strive to over simplify a bit? But, ok. When I
> lay down a bar neodymium magnet, cover it with a sheet of paper and
> sprinkle iron powder upon it, to see the lines of force--what are those
> lines depicting? Are those photons? Are those waves? Are you
> completely sure they are only of static properties--and some type of
> movement is not occurring just outside my range of vision and ability to
> measure? Are they contained within a media I cannot see and measure?
>
> It is quite easy for me to generate those same lines of force with an
> electric energies' flow though a conductor. And, the reverse is also
> easy to accomplish, I can cause an electric energy to be generated by
> moving a conductor though these lines of force.
>
> I suspect, in the future, it will be easy to switch matter and energies'
> states back in forth, with similar ease.
>
> But, at this point, clear? Surely your vision is much better than my
> own ...
>
> And, if I am unable to get my mind completely wrapped around this
> problem, to be able to claim I understand this with precision--how would
> I suddenly be able to make claims about the much more complex?
>
> But, if you have the time, enlighten me, what is gravities relationship
> to magnetism? Is there a reason their properties share similar
> characteristics/behaviors? Know of any "iron powder tricks" to allow me
> to see gravities lines of force?
>
> I think gauss is a link in a chain--not a complete answer in itself, and
> a chain which is still missing links ...
>
> Regards,
> JS

John,
The moment one introduces equilibrium into the equation it
becomes a whole new ball game. I asked you to do something
with an antenna design, remember. Because therein
lies the clue to all this instead of talking around the houses.
Talking has proved nothing so try my way!
Today I am going to put my 160 meter antenna
onto the top of my tower so that I can try to get the impedance higher
tho it is useable at present on the ground.(Resonated at 20 ohms)
I made one for 80M and it was 60 ohms and the gain was undeniable.
I think only a 160M antenna will get believers so I will use one this
winter
on the bands. Yes I said bands (plural)
Nobody has done this before and I am sharing it with you.
In the next week or so I will attach it to a rotator
to see what the directional pattern is. (Actually I have two styles of
this
new antenna made).
If you did as I asked you may well have that next step that you talk
about.
Seeing is believing so why not take a look for your self.
Send me an Email if you hit a problem. I am sharing it with you purely
to put a lot of these experts in their place so you will have
what they can't have or want. You certainly will be closer to derive
the answer for yourself
Art

1163. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 16:45:15 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbepasrfj2@news.albasani.net>
Source record: 36681

art wrote:

> ...
> If you did as I asked you may well have that next step that you talk
> about.
> Seeing is believing so why not take a look for your self.
> ...
> Art
>

Art:

Sorry, but that is/would not be easy for me at present. I have moved into a smaller place. I am getting too old to maintain a large yard/home, etc.--even my antenna experiments are on a shrinking scale. Plus, I do more communications via IRC, instant messaging, email, news posting, video chat, cell phone, etc. than I ever did on amateur bands ... a sign of the times, perhaps.

I have been focused in a much different direction--small, stealth antennas are the mode of the day here--I attempt to stay 10-100 watts, just local traffic with a handful of friends.

Bought a new ford explorer and am not even going to bother moving the rig to it, besides, I have to bring the antenna in if I park the car on the street--cell phone is just too easy. Indeed, the XYL is favoring a 3 bedroom modular in a park with gated security--all cement--no yard--I may end up giving in to her wishes. The new area we have moved into is not without drug/gang/graffiti/ethnic-diversity problems--my own fault (graffiti on the car/fence/house, tires slashed and windows smashed if you leave the car outside at night, stabbing in a park just blocks away, etc.) ... even the nicer areas of town are five bedrooms with five different families of unknown ethnic origin occupying them--frequent marijuana growing busts. :-(

Geesh, I have gotten old and the world has changed--my kingdom for a few good neighbors ... at least at this location I have high speed DSL! (was using clearwire at old place and signal was poor, I had to "hack" the clearwire modem for an external antenna)

I will be looking forward for any information about your endeavors ...

Regards,
JS

1164. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 17:09:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <vlold3htrtu8nhh1uot161k54tu1ogcbq0@4ax.com>
Source record: 36682

On Sun, 02 Sep 2007 08:56:48 -0700, art <aunwin@insightbb.com> wrote:

>The moment one introduces equilibrium into the equation

Hi Arthur,

Ever wondered how the Latins used the root 'equ' in those two words?

The Latins also introduced the sugar into their sucrose
(and did not introduce nutrition into nutrasweet);
and discovered petrol in our petroleum;
and poured aqua into his aquarium;
and played euchre with the eucharist;
and laughed at the saccharine in this sacrament;
and slipped librium into someone's library....

Language be whack 2 what wrote in ebonics o' tennas.

73's
Richard Clark, KB7QHC

1165. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 17:13:56 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns999F6818016B1HuckleberryREMOVEbig@198.186.192.196>
Source record: 36683

>> I am having a heck of a time locating a source of good information
>> on
>> how to make an effective common mode filter using the snap-on type
>> ferrite beads such as available at RAdio Shack.

> Someone needs to characterize those beads.
> What is the one-turn choking impedance at
> 10 MHz?

That is a good point. I'm not even sure of the vendor of the numerous split beads I have on hand. The ferrite is about 1/2" thick, 1" in diameter, and a 5/8" hole diameter. Don't know the material. The plastic housing is labeled " F / R " with the slant bar being a lightning bolt, and the part number is: 80640* . (that's an asterisk after the zero.)

Ed

1166. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 17:19:20 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1188753560.424529.140320@22g2000hsm.googlegroups.com>
Source record: 36584

On 2 Sep, 09:45, John Smith <assemblywiz...@gmail.com> wrote:
> art wrote:
>
> > ...
>
> > If you did as I asked you may well have that next step that you talk
> > about.
> > Seeing is believing so why not take a look for your self.
> > ...
> > Art
>
> Art:
>
> Sorry, but that is/would not be easy for me at present. I have moved
> into a smaller place. I am getting too old to maintain a large
> yard/home, etc.--even my antenna experiments are on a shrinking scale.
> Plus, I do more communications via IRC, instant messaging, email, news
> posting, video chat, cell phone, etc. than I ever did on amateur bands
> ... a sign of the times, perhaps.
>
> I have been focused in a much different direction--small, stealth
> antennas are the mode of the day here--I attempt to stay 10-100 watts,
> just local traffic with a handful of friends.
>
> Bought a new ford explorer and am not even going to bother moving the
> rig to it, besides, I have to bring the antenna in if I park the car on
> the street--cell phone is just too easy. Indeed, the XYL is favoring a
> 3 bedroom modular in a park with gated security--all cement--no yard--I
> may end up giving in to her wishes. The new area we have moved into is
> not without drug/gang/graffiti/ethnic-diversity problems--my own fault
> (graffiti on the car/fence/house, tires slashed and windows smashed if
> you leave the car outside at night, stabbing in a park just blocks away,
> etc.) ... even the nicer areas of town are five bedrooms with five
> different families of unknown ethnic origin occupying them--frequent
> marijuana growing busts. :-(
>
> Geesh, I have gotten old and the world has changed--my kingdom for a few
> good neighbors ... at least at this location I have high speed DSL!
> (was using clearwire at old place and signal was poor, I had to "hack"
> the clearwire modem for an external antenna)
>
> I will be looking forward for any information about your endeavors ...
>
> Regards,

> JS

I'll get it to you
Art

1167. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 17:53:37 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns999F6ED0EEF07HuckleberryREMOVEbig@64.209.0.95>
Source record: 36585

>
> That is a good point. I'm not even sure of the vendor of the numerous

After some additional Google research, I found them. Made by Fair-
Rite Products Corp. PN is probably: 2643806402. Product description
matches unit on hand, and lists it as type 43 material with a Z around
where I want to operate of about 20 ohms.

Ed

1168. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 18:01:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fguld393sj72dis7nbp1bp54smoa8idif0@4ax.com>
Source record: 36586

On 2 Sep 2007 17:53:37 GMT, Ed G <Huckleberry_REMOVE_@bigvalley.net>
wrote:

>
>>
>> That is a good point. I'm not even sure of the vendor of the numerous
>
>
> After some additional Google research, I found them. Made by Fair-
>Rite Products Corp. PN is probably: 2643806402. Product description
>matches unit on hand, and lists it as type 43 material with a Z around
>where I want to operate of about 20 ohms.
>

Hi Ed,

Read the fine print. This Z probably relates to some "standard" size
item, such as a small bead and not your clip-on. The boon here is
your clip-on will probably present more resistance to common modes.

73's
Richard Clark, KB7QHC

1169. Re: 160m Stealth - (was- LQQKing for 160m)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 19:52:11 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <jNadneXElYzMiUbbnZ2dnUVZ_qiinZ2d@comcast.com>
Source record: 36587

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:K9CAi.395$FO2.347@newssvr14.news.prodigy.net...
> John Doe wrote:
>> 2] I live in a Antenna restricted community, and I have a 40ft pine
>> tree in my back yard.
>
> Now you are getting somewhere. Run a 40 foot vertical wire
> up the tree and use some of the upper limbs for a top hat
> made out of small wires. Feed it at the base of the tree
> with an autotuner. A 40 foot vertical will radiate ten
> times as much RF on 160m as will a 10 foot vertical.
> The addition of top hat wires can double that figure.
> You may get such an antenna to be 10% efficient.
>
>> As far as radials go - They are out of the question.
>
> At the autotuner, you need a counterpoise of some kind
> unless you live in a salt water swamp. If you can bury
> coax, can you also bury a 100 foot counterpoise? Note
> that the ground causes the counterpoise to have a low
> velocity factor so 1/4WL of wire is not necessary.
> --
> 73, Cecil http://www.w5dxp.com

1] The 160m whip assy that I originally planned to use is CENTER-LOADED
which I think is better than a base loaded whip?

2] If I decide to go with a 30 or 40 foot length of bare wire up the
tree, How long should the TOPHAT wires be?

73's

1170. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 22:22:55 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99A0553E392B9nonenowhere@61.9.191.5>
Source record: 36588

Ed G <Huckleberry_REMOVE_@bigvalley.net> wrote in
news:Xns999F6ED0EEF07HuckleberryREMOVEbig@64.209.0.95:

>
>>
>> That is a good point. I'm not even sure of the vendor of the
>> numerous
>
>
> After some additional Google research, I found them. Made by
> Fair-
> Rite Products Corp. PN is probably: 2643806402. Product description
> matches unit on hand, and lists it as type 43 material with a Z around
> where I want to operate of about 20 ohms.

My guess is that you got the 20 ohms (for an unstated intended frequency of use) by extrapolation of the published data from 10 to 250MHz. You probably also read that the core material is recommended for 25 to 300MHz. Both of these would suggest that the material is not the best for your intended frequency, whatever that is.

So, for an effective choke, you may need 25 to 50 of these things. They are only a half inch long each, so that is just 13 to 25 inches in length in total, not unusual for that type of choke.

Owen

>
> Ed
>
>
>

1171. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 23:05:18 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <OkHCi.23730$eY.13937@newssvr13.news.prodigy.net>
Source record: 36589

Richard Clark wrote:
> and poured aqua into his aquarium;

and performed hysterectomies to avoid hysteria.
--
73, Cecil http://www.w5dxp.com

1172. Re: 160m Stealth - (was- LQQKing for 160m)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 23:21:21 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <PzHCi.1042$4J3.340@newssvr22.news.prodigy.net>
Source record: 36590

John Doe wrote:
> 1] The 160m whip assy that I originally planned to use is CENTER-LOADED
> which I think is better than a base loaded whip?

Yep, and a center-loaded 40 ft. long wire is better than
a center-loaded assy shorter than 40 ft. on 160m. There
is no perfect substitute for length and height on 160m.

> 2] If I decide to go with a 30 or 40 foot length of bare wire up the
> tree, How long should the TOPHAT wires be?

As long as you can make them and as many as you can
manage. Best to check the resonant frequency during
the installation process but you are not likely to
make the top hat too big on 160m with a 1/12 wavelength
vertical wire. Resonating the system using only a large
top hat would be ideal. Of course, you will be dealing
with a low feedpoint resistance, too low to be matched
without a ~1:4 unun or equivalent.
--
73, Cecil http://www.w5dxp.com

1173. Re: 160m Stealth - (was- LQQKing for 160m)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 23:31:06 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <PridnTUjRrgC2kbbnZ2dnUVZ_jydnZ2d@comcast.com>
Source record: 36591

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:PzHCi.1042$4J3.340@newssvr22.news.prodigy.net...
> John Doe wrote:
>> 1] The 160m whip assy that I originally planned to use is
>> CENTER-LOADED which I think is better than a base loaded whip?
>
> Yep, and a center-loaded 40 ft. long wire is better than
> a center-loaded assy shorter than 40 ft. on 160m. There
> is no perfect substitute for length and height on 160m.
>
>> 2] If I decide to go with a 30 or 40 foot length of bare wire up the
>> tree, How long should the TOPHAT wires be?
>
> As long as you can make them and as many as you can
> manage. Best to check the resonant frequency during
> the installation process but you are not likely to
> make the top hat too big on 160m with a 1/12 wavelength
> vertical wire. Resonating the system using only a large
> top hat would be ideal. Of course, you will be dealing
> with a low feedpoint resistance, too low to be matched
> without a ~1:4 unun or equivalent.
> --
> 73, Cecil http://www.w5dxp.com

Could I use the whip configuration as the center load coil, and just add
some more wire to the top end of the whip and more wire to the bottom end??

73's

1174. Hearing a Talking House on 1670 kHz with the Voice of . . .

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-02 23:52:36 UTC
From: RHF <rhf-newsgroups@pacbell.net>
Message-ID: <1188777156.644465.29400@k79g2000hse.googlegroups.com>
Source record: 36592
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On Sep 2, 12:29 am, Jasen Betts <ja...@free.net.nz> wrote:
> On 2007-08-30, Tam/WB2TT <t-tammaru@c0mca$t.net> wrote:
>
> > I am curious here. At some point you have to switch from metallic conductors
> > and antennas to lenses and other optics. Any idea what the highest frequency
> > RF amplifier works at?
>
> I've heard of X-ray lasers.
>
> Bye.
> Jasen

I am Hearing a Talking House on 1670 kHz
with the Voice of "Randy the Radio Realitor"
-aka- Randy Steigler => http://www.randysteiger.com/
.
Re/Max Del Oro -in- San Luis Obispo County, CA
http://www.deloroproperties.com/
Speaking of Astronomical - SFH : 3Br+2Ba ~ $385K
.
Twain Harte, CA 95383 -USA- ~ RHF
.
.
. .

1175. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 01:06:19 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns999FB82F3B117HuckleberryREMOVEbig@198.186.192.196>
Source record: 36593

>>
>> After some additional Google research, I found them. Made by
>> Fair-
>> Rite Products Corp. PN is probably: 2643806402. Product
>> description matches unit on hand, and lists it as type 43 material
>> with a Z around where I want to operate of about 20 ohms.
>
> My guess is that you got the 20 ohms (for an unstated intended
> frequency of use) by extrapolation of the published data from 10 to
> 250MHz. You probably also read that the core material is recommended
> for 25 to 300MHz. Both of these would suggest that the material is not
> the best for your intended frequency, whatever that is.
>
> So, for an effective choke, you may need 25 to 50 of these things.
> They are only a half inch long each, so that is just 13 to 25 inches
> in length in total, not unusual for that type of choke.
>

Actually, since I probably will be using RG8X I can most likely
loop a couple turns through each bead... which should preclude the need
for quite as many.

Ed

1176. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 01:10:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbfmts$o3j$1@news.albasani.net>
Source record: 36594

John Smith wrote:
> Ok. You might ask me, "Why do you laugh at people discussing antennas
> emitting photons?
> ...
> Regards,
> JS

Ok. So you pose your arguments why photons are at play ... I listen, we move to the second level ...

On which, I respond; "Why would the mere length/phasing of elements on an antenna be able to cause one to act as a mirror (the one longer than DE) and the other as a director (the one shorter than DE)?

All I can visualize are swarms of these little energy bundles (their shape is important to some, however, at this exact point, not me) colliding with those being emitted from the DE--then, swarms of these little energy bundles being emitted from the director are only leaving in a forward direction--causing a vacuum and pulling those emitted from the DE along with 'em, and along with those "repulsed" from the reflector ... I really am in need of a good explanation here. I mean, come on now, certainly you can understand my difficulty in following all this--right?

I mean charges on the grid of a vacuum tube can, apparently, cause things similar to these with particles/energy-packets; but, an antenna???

Regards,
JS

1177. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 02:03:15 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99A07A991F1A1nonenowhere@61.9.191.5>
Source record: 36595

Ed G <Huckleberry_REMOVE_@bigvalley.net> wrote in
news:Xns999FB82F3B117HuckleberryREMOVEbig@198.186.192.196:

>
>>>
>>> After some additional Google research, I found them. Made by
>>> Fair-
>>> Rite Products Corp. PN is probably: 2643806402. Product
>>> description matches unit on hand, and lists it as type 43 material
>>> with a Z around where I want to operate of about 20 ohms.
>>
>> My guess is that you got the 20 ohms (for an unstated intended
>> frequency of use) by extrapolation of the published data from 10 to
>> 250MHz. You probably also read that the core material is recommended
>> for 25 to 300MHz. Both of these would suggest that the material is not
>> the best for your intended frequency, whatever that is.
>>
>> So, for an effective choke, you may need 25 to 50 of these things.
>> They are only a half inch long each, so that is just 13 to 25 inches
>> in length in total, not unusual for that type of choke.
>>
>
>
> Actually, since I probably will be using RG8X I can most likely
> loop a couple turns through each bead... which should preclude the need
> for quite as many.

Am I right that this is a very short length of coax in a vehicle, and the VSWR will be low due to the ATU at the feedpoint, and that the ATU ground / coax braid will be connected to the vehicle metal framework? So why use thick coax? Why the choke?

If you need a choke, you could get some cores that are a neat fit over RG58, at 10MHz appropriate type 31 cores has a Z of 115/inch. That doesn't address the issue of whether the power / control connection needs protection.

Actually, I am not sure why you are doing this anyway, is it just in case or is there a demonstrated need?

Owen

1178. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 03:26:50 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns999FD00243FF1HuckleberryREMOVEbig@198.186.192.196>
Source record: 36596

> Am I right that this is a very short length of coax in a vehicle, and
> the VSWR will be low due to the ATU at the feedpoint, and that the ATU
> ground / coax braid will be connected to the vehicle metal framework?
> So why use thick coax? Why the choke?
>
> If you need a choke, you could get some cores that are a neat fit over
> RG58, at 10MHz appropriate type 31 cores has a Z of 115/inch. That
> doesn't address the issue of whether the power / control connection
> needs protection.
>
> Actually, I am not sure why you are doing this anyway, is it just in
> case or is there a demonstrated need?
>
> Owen
>

Well, to be honest, I was primarily planning on using the choke for a base station application.... will have some sort of balanced dipole or loop fed by an SG-237 tuner. I wanted the choke for the coax feeding the tuner.

On the RV, I have a 23' whip on the back (ladder) which I had planned on feeding with another SG-237. (Currently it is fed with a home-brew base loading coil assy, on which I must manually change frequency taps.) In either case, I thought it might be beneficial to put a common mode choke on the RG8X feeding that antenna, too, since I do have RF causing various issues inside the coach while I am transmitting.

On your RV grounding question, yes, the antenna feedpoint and all related ground areas are very well bonded to the main vehicle chassis with rather large tinned braid, (2" wide).

Ed

1179. Re: 160m Stealth - (was- LQQKing for 160m)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 03:41:39 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <VnLCi.1706$3Y1.749@newssvr17.news.prodigy.net>
Source record: 36597

John Doe wrote:
> Could I use the whip configuration as the center load coil, and just add
> some more wire to the top end of the whip and more wire to the bottom end??

Using more wire would make for a more efficient antenna
but you would need to short out some turns on the 160m
coil which causes a lowering of the coil Q. Ideally,
you would just use (wind) a lower inductance coil, one
with the exact amount of inductance needed. With a
large top hat and more vertical wire, the size of the
coil is considerably lessened. But shorting out the
unneeded turns on a coil is a time honored tradition.
--
73, Cecil http://www.w5dxp.com

1180. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 03:47:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qj0nd3d9s7a4fq57egnal19k4nt0cl5r45@4ax.com>
Source record: 36598

On 03 Sep 2007 03:26:50 GMT, Ed G <Huckleberry_REMOVE_@bigvalley.net>
wrote:

>loop fed by an SG-237 tuner. I wanted the choke for the coax feeding the
>tuner.

Hi Ed,

You will have to choke the control lines just as much.

>I do have RF causing
>various issues inside the coach while I am transmitting.

That could be as easily through the air, or "ground currents" in the
chassis. All points of the chassis, doors, hood, etc. are not usually
bonded very well. Even the exhaust system can be "floating" to
provide a path from ground, right up into the engine compartment.

> On your RV grounding question, yes, the antenna feedpoint and all
>related ground areas are very well bonded to the main vehicle chassis
>with rather large tinned braid, (2" wide).

Re my paragraph above, does this include doors? A lot may be taken
for granted and hinged points are sometimes insulated, allowing large
panels (capacitive plates) to couple RF inside what is considered to
be an otherwise tight box.

73's
Richard Clark, KB7QHC

1181. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 03:54:55 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46db9d1b$0$6393$4c368faf@roadrunner.com>
Source record: 36603

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:o2obd39ql1rogc2bsfrift448mb3i0is91@4ax.com...
> On Wed, 29 Aug 2007 12:53:25 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>Ok. You might ask me, "Why do you laugh at people discussing antennas
>>emitting photons?
>
> (You don't close quotes is one larf. Why people laugh is a condition
> of creationist-like explanations that attend the topic.)
>
>>And, I would answer:
>>
>>Photon emissions from an antenna element(s) seems difficult, at best, to
>>visualize (no pun intended.)
>
> The explanation is simple. Because of the pun (intended or otherwise)
> too many expect that the experience of "seeing" is sufficient to
> understanding "visualization." Nothing could be further from the
> truth. The quote that follows provides sufficient evidence to this:
>
>>Consider a 1/2 inch dia. single element antenna (monopole?) If the
>>thing is emitting photons, one would think the photons are being emitted
>>equally around the elements circumference.
>
> This confuses thinking with visualization now. Unfortunately it
> proceeds from a false premise. It is also a false premise if we
> simply ignore "photon" and discuss this in the rather more prosaic
> term of "fields."
>
> All points of all surfaces are active emitters. Your "perception"
> (visualization) is a far field response of the total contributions of
> all sources and their phases. This perception creates an "illusion."
> Illusions are fun and interesting, but they bear only on cognitive
> issues, not Physics.
>
> 73's
> Richard Clark, KB7QHC

If the concept of duality is difficult to grasp when it comes to photons
just imagine how hard it will be to grasp that duality exist for all
particles and therefore all matter.

Jimmie

1182. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 04:08:44 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <gNLCi.48641$Um6.5980@newssvr12.news.prodigy.net>
Source record: 36599

John Smith wrote:
> On which, I respond; "Why would the mere length/phasing of elements on
> an antenna be able to cause one to act as a mirror (the one longer than
> DE) and the other as a director (the one shorter than DE)?

It has to do with the phasing of the photons and the
spacing of the elements. The phasing+spacing results
in constructive interference in the direction of the
director and destructive interference in the direction
of the reflector referenced to the driven element. The
length of the element affects (and effects) the phase
of the re-radiated signals from the parasitic elements.

Using EZNEC with two identical driven elements, one
can control the direction of maximum radiation simply
by adjusting the phasing of one of the driven elements
referenced to the other. Reversing the phasing reverses
the direction of maximum radiation.
--
73, Cecil http://www.w5dxp.com

1183. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 04:09:23 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99A08FFB84C9Cnonenowhere@61.9.191.5>
Source record: 36600

Richard Clark <kb7qhc@comcast.net> wrote in
news:qj0nd3d9s7a4fq57egnal19k4nt0cl5r45@4ax.com:

> On 03 Sep 2007 03:26:50 GMT, Ed G <Huckleberry_REMOVE_@bigvalley.net>
> wrote:
>
>>loop fed by an SG-237 tuner. I wanted the choke for the coax feeding
>>the tuner.
>
> Hi Ed,
>
> You will have to choke the control lines just as much.
>
>>I do have RF causing
>>various issues inside the coach while I am transmitting.
>
> That could be as easily through the air, or "ground currents" in the
> chassis. All points of the chassis, doors, hood, etc. are not usually
> bonded very well. Even the exhaust system can be "floating" to
> provide a path from ground, right up into the engine compartment.
>
>> On your RV grounding question, yes, the antenna feedpoint and
>> all
>>related ground areas are very well bonded to the main vehicle chassis
>>with rather large tinned braid, (2" wide).
>
> Re my paragraph above, does this include doors? A lot may be taken
> for granted and hinged points are sometimes insulated, allowing large
> panels (capacitive plates) to couple RF inside what is considered to
> be an otherwise tight box.

Richard, getting clear details is like drawing teeth. I suspect the RV might be fibreglass, and so about as RF transparent as you might get. Further, something hints to me that the grounded ATU is on top of the ladder, so it isn't really grounded.

But in the absense of clear details of a single scenario, I can't help.

Owen

1184. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 04:15:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbg1of$5vn$1@news.albasani.net>
Source record: 36601

John Smith wrote:
> John Smith wrote:
>> Ok. You might ask me, "Why do you laugh at people discussing antennas
>> emitting photons?
>> ...
>> Regards,
>> JS
>
> Ok. So you pose your arguments why photons are at play ... I listen, we
> move to the second level ...
> ...
> Regards,
> JS

This:

"Einstein also said that behind every great theory there is a simple
physical picture that even lay people can understand. In fact, he said,
if a theory does not have a simple underlying picture, then the theory
is probably worthless. The important thing is the physical picture; math
is nothing but bookkeeping."

And this:

Amrit Sorli: Einstein stood on the point that the notion of "space"
designates "gravitational ether", which is a physical reality. "With
regards to the general theory of relativity, space cannot be imagined
without ether", says he in his "Ether and the Theory of Relativity".
According to Einstein, gravitational ether does not have the same
properties as ponderable matter, that is why it cannot be described by
notions such as "time" and "motion" .
...
Time is not a physical reality, the past and the future exist only in
human reasoning. Changes take place "here and now" in the gravitational
ether.

From here:

http://www.mu6.com/einstein.html

I am sure most will find it highly interesting and enlightening ...

Regards,
JS

1185. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 05:26:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbg5u0$8p7$1@news.albasani.net>
Source record: 36602

Cecil Moore wrote:

> ...
> Using EZNEC with two identical driven elements, one
> ...

Cecil:

The "approximations" which EZNEC accomplishes, may, or may not be real--indeed, much of what these "antenna tools" have told me appears to work in reality ... I CANNOT and do NOT say these tools are without value.

However, when you have an "un-ponder-able unknown", such as the ether, and you see NO mention of it in mathematical equations, no allowances made for it, no affects/effects noted for it--indeed, when you see a public ignorant of it--don't you grow a bit suspicious? I mean, and according to Einstein, every bit of matter we can possibly view was torn asunder from it! It is real, we only exist in an altered and unnatural state--along with our antennas.

Why has ether become synonymous with "kook?" It should not be; why does it seem to have been missing from everyones physics books but mine? My books just stated it was as it appears to be--unknown, but a real thing--I took it to be a thing future minds would "discover"; that its' promise was a better understanding of the world, in the future.

Now, we can come up with a lot of explanations about a lot of things--might it not help to give this KNOWN/REAL thing some thought; ask some questions on its' possible interactions with our antennas?

If my wonder-ings about this ether cause me to be a marked man and easily dismissed--so be it. And, I would prefer to read and experiment in this direction than jump to the conclusion our antennas are emitting photons, others may feel free to disagree with me and suffer no evil intentions from me.

Whatever is the reality of this matter, let's pray it quickly becomes known; either way I will be just as thrilled. New discoveries, which we can get our minds wrapped around, speak of new and interesting phenomenon we can manipulate to our benefit.

And, debate is interesting ...

Regards,
JS

1186. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 06:02:41 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46dba37b$0$28820$4c368faf@roadrunner.com>
Source record: 36604

```
"John Smith" <assemblywizard@gmail.com> wrote in message
news:fbg1of$5vn$1@news.albasani.net...
> John Smith wrote:
>> John Smith wrote:
>>> Ok. You might ask me, "Why do you laugh at people discussing antennas
>>> emitting photons?
>>> ...
>>> Regards,
>>> JS
>>
>> Ok. So you pose your arguments why photons are at play ... I listen, we
>> move to the second level ...
>> ...
>> Regards,
>> JS
>
> This:
>
> "Einstein also said that behind every great theory there is a simple
> physical picture that even lay people can understand. In fact, he said, if
> a theory does not have a simple underlying picture, then the theory is
> probably worthless. The important thing is the physical picture; math is
> nothing but bookkeeping."
>
> And this:
>
> Amrit Sorli: Einstein stood on the point that the notion of "space"
> designates "gravitational ether", which is a physical reality. "With
> regards to the general theory of relativity, space cannot be imagined
> without ether", says he in his "Ether and the Theory of Relativity".
> According to Einstein, gravitational ether does not have the same
> properties as ponderable matter, that is why it cannot be described by
> notions such as "time" and "motion" .
> ...
> Time is not a physical reality, the past and the future exist only in
> human reasoning. Changes take place "here and now" in the gravitational
> ether.
>
> From here:
>
> http://www.mu6.com/einstein.html
>
> I am sure most will find it highly interesting and enlightening ...
>
```

> Regards,
> JS

It is generally excepted that ether is space-time.
There are a couple concepts you must understand.
Space is not nothing.
When the universe was created it was not just the result of material being propagated through space, it was the creation of space itself.

This was not a new concept for Einstien, it was an idea he had difficulty and uncertainty about expressing.
Even Einstien had to deal with peer pressure.

Jimmie

1187. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 06:12:31 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbg8kf$155$1@news.albasani.net>
Source record: 36605

Jimmie D wrote:

> ...
> It is generally excepted that ether is space-time.
> There are a couple concepts you must understand.
> Space is not nothing.
> When the universe was created it was not just the result of material being
> propagated through space, it was the creation of space itself.
>
> This was not a new concept for Einstien, it was an idea he had difficulty
> and uncertainty about expressing.
> Even Einstien had to deal with peer pressure.
>
>
> Jimmie

I must disagree totally, and for reasons you will find echoed on that
URL I gave.

Our material bodies are as if they are constructed of screen--ether sees
no resistance whatsoever in passing through our beings, indeed, all
matter exists as such to it ... I simply speculate that the EM
waves/radiations from an antenna have the power to interact with it
(and, possibly even Cecils' photons.)

Matter is mostly space, between each atom in your body is something like
a relative football field of distance--here ether exists.

Indeed, with the vast distances between the atoms/electrons in a current
carrying conductor--there is much which could happen to the likes of ether.

Regards,
JS

1188. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 06:15:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <d49nd39ei5rtjhthabbeaplpj22lb3csss@4ax.com>
Source record: 36606

On Mon, 3 Sep 2007 02:02:41 -0400, "Jimmie D"
<GFENDER@carolina.rr.com> wrote:

>Even Einstien had to deal with peer pressure.

Which means Einstein didn't troll his ideas. [and provided
equilibrium in his equations - as does all of engineering, math, and
science as a commonplace.]

73's
Richard Clark, KB7QHC

1189. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 06:42:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbgadj$37s$1@news.albasani.net>
Source record: 36607

John Smith wrote:

> ...

That was poorly expressed, ether always existed. You must grow to
accept that ether is god--is, was and always will be.

The big bang created matter, matter needed a medium to be "created in",
and ether was there for it--I suspect we ARE ether, just an altered form.

Regards,
JS

1190. Ideas for Simple Homemade 17 Metre Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 08:56:22 UTC
From: Andiroo <a.richman@btinternet.com>
Message-ID: <1188809782.281489.165310@d55g2000hsg.googlegroups.com>
Source record: 36608

All

Can anyone point me to some simple designs for a home made 17 metre antenna. I am looking for some simple half wave dipole type designs. I have a short back yard and have struggled to put up a half wave G5RV (managed in the end with a pole on side of the house) so it cant be too long.

I have had a quick google search and did not come up with much.

Thanks for support

Andy

1191. Re: Ideas for Simple Homemade 17 Metre Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 10:15:43 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <7dedncAHhPQAQ0bbnZ2dnUVZ8tWnnZ2d@pipex.net>
Source record: 36609

> Can anyone point me to some simple designs for a home made 17 metre
> antenna. I am looking for some simple half wave dipole type designs. I
> have a short back yard and have struggled to put up a half wave G5RV
> (managed in the end with a pole on side of the house) so it cant be
> too long.
==========
Suggest you consider installing the above antenna as an inverted Vee,
using that pole with the 2 legs sloping to suitable points .

Frank GM0CSZ / KN6WH

1192. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 13:25:57 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46dc12db$0$6423$4c368faf@roadrunner.com>
Source record: 36610

"John Smith" <assemblywizard@gmail.com> wrote in message
news:fbg8kf$155$1@news.albasani.net...
> Jimmie D wrote:
>
> > ...
>> It is generally excepted that ether is space-time.
>> There are a couple concepts you must understand.
>> Space is not nothing.
>> When the universe was created it was not just the result of material
>> being propagated through space, it was the creation of space itself.
>>
>> This was not a new concept for Einstien, it was an idea he had difficulty
>> and uncertainty about expressing.
>> Even Einstien had to deal with peer pressure.
>>
>>
>> Jimmie
>
> I must disagree totally, and for reasons you will find echoed on that URL
> I gave.
>
> Our material bodies are as if they are constructed of screen--ether sees
> no resistance whatsoever in passing through our beings, indeed, all matter
> exists as such to it ... I simply speculate that the EM waves/radiations
> from an antenna have the power to interact with it (and, possibly even
> Cecils' photons.)
>
> Matter is mostly space, between each atom in your body is something like a
> relative football field of distance--here ether exists.
>
> Indeed, with the vast distances between the atoms/electrons in a current
> carrying conductor--there is much which could happen to the likes of
> ether.
>
> Regards,
> JS
>

Then you believe space is nothing?
Then you believe that the creation of the universe is jis the propagation of
matter through space?

What I said in no way disagrees with the article and besides that I know of
no published work of Einstiens that states what the article said. Perhaps
this was something he pondered at one time. I am sure he changed his

thinking on a lot of things over the years given the fact he and other physicist were breaking new ground at the time. The discovery that light always travels at the same speed relative to the observer opened up a real can of worms.

You appear to have real problem dealing with the fact that there is no difference between matter and energy, everythinhg exist in a dual state.

Jimmie

1193. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 14:17:09 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <LHUCi.5329$z_5.5174@nlpi069.nbdc.sbc.com>
Source record: 36611

Jimmie D wrote:
> If the concept of duality is difficult to grasp when it comes to photons
> just imagine how hard it will be to grasp that duality exist for all
> particles and therefore all matter.

What is particularly interesting (to me) is the
wave-particle duality of a C60 Buckyball where
60 matrixed carbon atoms exhibit wave properties.
--
73, Cecil http://www.w5dxp.com

1194. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 14:19:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbh569$kf8$1@news.albasani.net>
Source record: 36612

Cecil Moore wrote:
> Jimmie D wrote:
>> If the concept of duality is difficult to grasp when it comes to
>> photons just imagine how hard it will be to grasp that duality exist
>> for all particles and therefore all matter.
>
> What is particularly interesting (to me) is the
> wave-particle duality of a C60 Buckyball where
> 60 matrixed carbon atoms exhibit wave properties.

Sixty?

That's a LOT of balls! :-)

Regards,
JS

1195. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 14:24:04 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <dOUCi.5331$z_5.2834@nlpi069.nbdc.sbc.com>
Source record: 36613

John Smith wrote:
> Time is not a physical reality, the past and the future exist only in
> human reasoning.

Lots of things didn't exist before homo sapiens. :-)
--
73, Cecil http://www.w5dxp.com

1196. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 14:29:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbh5o4$kf8$2@news.albasani.net>
Source record: 36614

Jimmie D wrote:

> ...
> Then you believe space is nothing?
> Then you believe that the creation of the universe is jis the propagation of
> matter through space?
>

It is obvious Einstein was right, if you cannot state a simple model
which people can grasp, which obeys the rules of logic--all you are
running is a complex shell game.

Matter exists in the soup of ether ...

> What I said in no way disagrees with the article and besides that I know of
> no published work of Einstiens that states what the article said. Perhaps
> this was something he pondered at one time. I am sure he changed his
> thinking on a lot of things over the years given the fact he and other
> physicist were breaking new ground at the time. The discovery that light
> always travels at the same speed relative to the observer opened up a real
> can of worms.
>

At some speed, the resistance of travel though the ether becomes of such
a significant drag or force, matter no longer can traverse without
resistance--this is the speed of light.

> You appear to have real problem dealing with the fact that there is no
> difference between matter and energy, everythinhg exist in a dual state.

I have no problem with matter and energy being composed only of an
altered state of the ether. But you are absolutely correct, I have as
much problem with matter and energy being the same, as the smoke, light,
ash and heat left from a tree burning, as it being the SAME as the tree
itself! DUH! But in a very pure sense--they are ... it can be argued
that the only real difference matters to life on earth.

> Jimmie

Regards,
JS

1197. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 14:35:50 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <gVUCi.46118$t9.10443@bignews7.bellsouth.net>
Source record: 36615

Cecil Moore wrote:
> John Smith wrote:
>> Time is not a physical reality, the past and the future exist only in
>> human reasoning.
>
> Lots of things didn't exist before homo sapiens. :-)

What if all things were true - and false? Personally, I'd just open the box and ask the cat. Assuming that it was still alive, that is. <G>

And who was this Schroedinger guy anyway?

Ed, NM2K

1198. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 15:16:48 UTC
From: Spam Trap <bit-bucket@config.com>
Message-ID: <slrnfdo9b0.2fp.bit-bucket@shell.config.com>
Source record: 36616

On Sun, 02 Sep 2007 00:54:23 -0500, Cecil Moore wrote:
> Ed G wrote:
>> I am having a heck of a time locating a source of good information on
>> how to make an effective common mode filter using the snap-on type ferrite
>> beads such as available at RAdio Shack.
>
> Someone needs to characterize those beads.
> What is the one-turn choking impedance at 10 MHz?

I'm sure it varies from week-to-week -- depending on which communist
chinese Piece-of-Crap factory it comes from and how high the dog dung
component was in the mix for the day.

1199. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 15:22:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbh8sq$5mq$1@news.albasani.net>
Source record: 36617

Jimmie D wrote:

> ...
> What I said in no way disagrees with the article and besides that I know of
> no published work of Einstiens that states what the article said. Perhaps
> this was something he pondered at one time. I am sure he changed his
> thinking on a lot of things over the years given the fact he and other
> ...
> Jimmie

I know of no significant denial(s) made my Einstein to what has been
stated. One can begin here:

http://www-groups.dcs.st-and.ac.uk/~history/Extras/Einstein_ether.html

Let me know of any works, statements, writings which I am ignorant of
and to ...

Regards,
JS

1200. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 15:23:23 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rp8od3dcehnf2u0hv8knav3vkpdiucnqhe@4ax.com>
Source record: 36618

On Mon, 03 Sep 2007 10:35:50 -0400, Ed Cregger
<ecregger@bellsouff.net> wrote:

>And who was this Schroedinger guy anyway?

He was Lucia's boyfriend who played the Pianoforte. Their lives were
humorously chronicled in an illustrated fiction called "Goober Peas."
Continuing themes of their friends and relatives populated this series
with such stories as the "strange attractors" of kites and trees, or
the wave function of a football that couldn't be kicked. The
illustrator was purported to be one Eisenstein, but this was later
found to be erroneously inferred from earlier cinematic work with
similar themes found in "Aleksandr Nevskiy."

73's
Richard Clark, KB7QHC

1201. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 15:34:04 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <EuqdnRhAMtbntEHbnZ2dnUVZ8ternZ2d@bt.com>
Source record: 36619

"Ed Cregger" <ecregger@bellsouff.net> wrote in message
news:gVUCi.46118$t9.10443@bignews7.bellsouth.net...
> Cecil Moore wrote:
>> John Smith wrote:
>>> Time is not a physical reality, the past and the future exist only in
>>> human reasoning.
>>
>> Lots of things didn't exist before homo sapiens. :-)
>
>
> ---------
>
>
> What if all things were true - and false? Personally, I'd just open the
> box and ask the cat. Assuming that it was still alive, that is. <G>
>
> And who was this Schroedinger guy anyway?
>
>
> Ed, NM2K

The point Schroedinger was trying to make is that in the absence of information, there is no way we can absolutely know something. The very act of measuring or observing something causes the wave function to collapse and reveal an object's position, speed or some other state we are trying to establish. Opening the box and asking the cat seems eminently reasonable. The cat is never actually in a quasi alive/dead condition. In it's own 'universe' (box) it is either alive or dead. We cannot know which without opening the box at which point the two separated 'universes' collapse into one. Prior to opening the box it is necessary to consider both options alive or dead as a possibility but there is no third case where the cat is both alive and dead at the same time. The physical laws in our universe do not appear to allow for objects larger than a buckyball molecule of C60 to exist in quasi states.
Trying to establish whether individual photons or electromagnetic waves are emitted by an antenna suffers from the same difficulties. The very act of trying to establish what is being emitted will collapse the wave function of the photons or electromagnetic wave to reveal one or the other, but not both simultaneously.

Mike G0ULI

1202. FS: Service Manuals for Commercial, Amateur Equipment, Test Equipment

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 16:31:17 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <vFWCi.1322$tx1.202@read1.cgocable.net>
Source record: 36620
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Have a quantity of Test Equipment and Radio Communications Service Manuals,
both Commercial & Amateur
Most of them are in Like New Condition.
Prices are reasonable...mailing may more than the manuals..depending where
you live!

Please check my site: www.rodemi.com for what is available.
Click on the MANUALS Heading.
I am updating the site as time allows.
I recently retired from the Commercial 2-way radio business and would like
these useful manuals to find a good home.

Thanks for looking....Norm VE3CZI
Email me Directly: <insert Call Sign> at arrl.net ....<call sign> is
ve3czi

1203. Re: 160m Stealth - (was- LQQKing for 160m)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 16:56:12 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <-5idnRbZLLcSoUHbnZ2dnUVZ_t2inZ2d@comcast.com>
Source record: 36621

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:VnLCi.1706$3Y1.749@newssvr17.news.prodigy.net...
> John Doe wrote:
>> Could I use the whip configuration as the center load coil, and just add
>> some more wire to the top end of the whip and more wire to the bottom
>> end??
>
> Using more wire would make for a more efficient antenna
> but you would need to short out some turns on the 160m
> coil which causes a lowering of the coil Q. Ideally,
> you would just use (wind) a lower inductance coil, one
> with the exact amount of inductance needed. With a
> large top hat and more vertical wire, the size of the
> coil is considerably lessened. But shorting out the
> unneeded turns on a coil is a time honored tradition.
> --
> 73, Cecil http://www.w5dxp.com

1 more question - Instead of using either the fixed 160m stick w/whip
(stinger), or the 30 - 40 ft of wire, what do you think about using a
Screwdriver Antenna at the top of the tree and running either a counterpoise
or radials??
73's

1204. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 17:06:26 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99A066D1C4B63HuckleberryREMOVEbig@198.186.192.196>
Source record: 36622

>
> Richard, getting clear details is like drawing teeth. I suspect the RV
> might be fibreglass, and so about as RF transparent as you might get.
> Further, something hints to me that the grounded ATU is on top of the
> ladder, so it isn't really grounded.
>
> But in the absense of clear details of a single scenario, I can't help.
>

In my previous experience in newsgroups, I'll agree that getting details from those who pose questions here is difficult, and I guess I'm as guilty as the rest. However, my original question was regarding details of common mode choke filter design and has apparently morphed into my RV setup.

The RV is a 31' class C, all fiberglass shell, welded aluminum frame, on a Ford E450 chassis and cab up front. Although I realize there are many aspects that could cause RFI in the cab area of the motorhome, I merely wanted to use a choke filter to see what improvement might take place.

The SG-237 tuner does not use a control line, so no filtering needed here. The DC will be pulled off the back of the motorhome close by, and that source, as I previously mentioned, will also be routed through a common mode filter.

The antenna feedpoint / loaded base area is about three feet down from the top of the metal ladder. The metal ladder vertical rails is one piece construction, and is bonded at bottom of both rails with 2" tinned copper braid to the main chassis rails with pieces running about 22" length. All in all, about as good a ground as can be obtained under the circumstance.

Ed

1205. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 17:35:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbhgkc$qg0$1@news.albasani.net>
Source record: 36623

Ed G wrote:

> ...
> Ed

Clamp 'em on, recheck match/swr/your-chosen-methods-of-tuning (or, with the gods--for that matter) to antenna ...

It can't explode; well, I don't think it can!

Since the power flow is on the center conductor and the inside shield of the braid, any impedance of unwanted currents on the outside would, logically, be of some benefit ...

If it ain't enough, buy more or change to a different type of material. Knowing the expected values of components, and benefits to expect, would only put a lot of icing on that cake ...

Regards,
JS

1206. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 17:38:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbhgquqnd1@news.albasani.net>
Source record: 36624

John Smith wrote:
> Ed G wrote:
>
> > ...
>> Ed
>
> Clamp 'em on, recheck match/swr/your-chosen-methods-of-tuning (or, with
> the gods--for that matter) to antenna ...
> ...

But then, you already guessed that--and what to expect here!

Regards,
JS

1207. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 18:19:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbhj6k$sf2$1@news.albasani.net>
Source record: 36625

Richard Clark wrote:
> On Mon, 03 Sep 2007 10:35:50 -0400, Ed Cregger
> <ecregger@bellsouff.net> wrote:
>
>> And who was this Schroedinger guy anyway?
>
> He was Lucia's boyfriend who played the Pianoforte. Their lives were
> humorously chronicled in an illustrated fiction called "Goober Peas."
> Continuing themes of their friends and relatives populated this series
> with such stories as the "strange attractors" of kites and trees, or
> the wave function of a football that couldn't be kicked. The
> illustrator was purported to be one Eisenstein, but this was later
> found to be erroneously inferred from earlier cinematic work with
> similar themes found in "Aleksandr Nevskiy."
>
> 73's
> Richard Clark, KB7QHC

Interesting.

Did it/he/they have anything to say about visions of silvery and copper
colored fingers plucking the harp strings of the seemingly invisible ether?

Regards,
JS

1208. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 18:38:49 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbhkbq$218$1@news.albasani.net>
Source record: 36626

John Smith wrote:

> ...
> Did it/he/they have anything to say about visions of silvery and copper
> colored fingers plucking the harp strings of the seemingly invisible ether?
>
> Regards,
> JS

This:

"The greatest change in the axiomatic basis of physics - in other words,
of our conception of the structure of reality - since Newton laid the
foundation of theoretical physics was brought about by Faraday's and
Maxwell's work on electromagnetic field phenomena.
Faraday must have grasped with unerring instinct the artificial nature
of all attempts to refer electromagnetic phenomena to
actions-at-a-distance between electric particles reacting on each other.
How was each single iron filing among a lot scattered on a piece of
paper to know of the single electric particles running round in a nearby
conductor? All these electric particles together seemed to create in the
surrounding space a condition which in turn produced a certain order in
the filings. These spatial states, today called fields, would, he was
convinced, furnish the clue to the mysterious electromagnetic
interactions. He conceived these fields as states of mechanical stress
in an elastically distended body (ether)."
(Albert Einstein, 1954)

From here:

http://www.spaceandmotion.com/Physics-Electromagnetic-Radiation-Spectrum-Waves.htm

Regards,
JS

1209. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 18:54:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <rvlod3l4b99ae13oj0cl70gmnir5404tdb@4ax.com>
Source record: 36627

On 03 Sep 2007 17:06:26 GMT, Ed G <Huckleberry_REMOVE_@bigvalley.net>
wrote:

> The antenna feedpoint / loaded base area is about three feet down from
>the top of the metal ladder. The metal ladder vertical rails is one
>piece construction, and is bonded at bottom of both rails with 2" tinned
>copper braid to the main chassis rails with pieces running about 22"
>length. All in all, about as good a ground as can be obtained under the
>circumstance.

Hi Ed,

Point in fact is that the "antenna" is actually a tuned radial, and it
is your "ground" that is the majority radiator.

73's
Richard Clark, KB7QHC

1210. Re: 160m Stealth - (was- LQQKing for 160m)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 18:56:51 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <u4mod3tlrtajoi8p7jdcdffkd7fmiono83@4ax.com>
Source record: 36628

On Mon, 3 Sep 2007 12:56:12 -0400, "John Doe" <hgorden@adelphia.net>
wrote:

>what do you think about using a
>Screwdriver Antenna at the top of the tree and running either a counterpoise
>or radials??

Put the screwdriver half to 2/3rds way up, top load, and lay out
whatever radials you can get away with.

73's
Richard Clark, KB7QHC

1211. Re: Hearing a Talking House on 1670 kHz with the Voice of . . .

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 18:58:33 UTC
From: r2000swler@hotmail.com
Message-ID: <1188845913.938666.28740@50g2000hsm.googlegroups.com>
Source record: 36629
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On Sep 3, 12:52 am, RHF <rhf-newsgro...@pacbell.net> wrote:
> On Sep 2, 12:29 am, Jasen Betts <ja...@free.net.nz> wrote:
>
> > On 2007-08-30, Tam/WB2TT <t-tammaru@c0mca$t.net> wrote:
>
> > > I am curious here. At some point you have to switch from metallic conductors
> > > and antennas to lenses and other optics. Any idea what the highest frequency
> > > RF amplifier works at?
>
> > I've heard of X-ray lasers.
>
> > Bye.
> > Jasen
>
> I am Hearing a Talking House on 1670 kHz
> with the Voice of "Randy the Radio Realitor"
> -aka- Randy Steigler =>http://www.randysteiger.com/
> .
> Re/Max Del Oro -in- San Luis Obispo County, CAhttp://www.deloroproperties.com/
> Speaking of Astronomical - SFH : 3Br+2Ba ~ $385K
> .
> Twain Harte, CA 95383 -USA- ~ RHF
> .
> .
> . .

This will be buried inside a completely unrelated thread, but there
are lots of "low power",
Part 15 100mW, devices in the MW band. There is a Military Graveyard
just about 15
miles south of me that has such a transmitter for "self guided
tours". I have seen/received
several "talking houses" including a solar powered one that I was very
tempted to visit
under the cover of dark and appropriate for my own use.

I have seen a few billboards with these also. Down toward Tennessee
the big firworks
outlets tended to use them about 8 years ago. I don't know if they are
still in use cause
I don't get down there these days.

Regarding my hunt for the UNID 1640 station rebroadcasting A NOAA
weather stream,

I had assumed by content it was at or near Cave Run Lake, near Morehead KY. But we visited there Friday and no signal. I talked to the Corp of Engineers and they suggested we check in Jackson. So off we went. As we approached Jackson it was clear it was not there. But I decided to check the Jackson Airport/NOAA office to see what they knew.

They were aware of the TIS stations in Winchester and Richmond that carried NOAA and were for use in the event of a nerve agent leak from the Blue Grass Army Depot in Richmond, but they knew of no station on 1640. They gave me a list of towns where there are low powered NOAA WX transmitters to check and it wasn't in any of them. On a lark we went to Richmond Yesterday and the TIS on 1610 is still only receivable right next the the emergency center. But there was a different station on 1640. This one is clearly connected with the Nerve Agent program and may be in Berea.

Sooner then later I hope to locate both 1640 transmitters.

I will post the main body of this under a new thread.

Terry

1212. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 19:06:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbhm04$4uu$1@news.albasani.net>
Source record: 36630

Ed G wrote:

> ...
> Ed

Oh yeah, Richard is quite correct there--don't choke off the counterpoise--but, I bet you already suspected that ... and, don't use the coax as a counterpoise! Well, unless you design for that ... but then, don't run the counterpoise in the inside of the vehicle ... well, your vehicle is fiberglass, kinda hard to hide from the antenna/counterpoise, but again, you already knew that ...

Regards,
JS

1213. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 19:30:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbhnbq$4uu$2@news.albasani.net>
Source record: 36631

art wrote:

> ...
> I'll get it to you
> Art
>

I got it--pun intended.

It should be becoming obvious that I have read Einstein--and believed.

Indeed, what other force can we produce upon the ether to achieve our communications? EM fields strike/push/pull/influence the ethers' strings ...

Those lines of force, seen in iron filings/powder, show "stress" of the ether--any engineer worth his salt will recognize these "stress lines" in a media ... in this case "gravitational ether"--an un-ponder-able media.

Regards,
JS

1214. Has anybody ever???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 20:06:50 UTC
From: merlin-7 <merlin-7@sc.rr.com>
Message-ID: <46dc69d5$0$19653$4c368faf@roadrunner.com>
Source record: 36632

Used a single, whip antenna for both 10 and 11 meters?

I almost never use 11 meters but during hurricane chasing, It is a must.

I am looking for the best way to use one single whip antenna for both bands. If one band needs to suffer in performance, it would need to be 11 meters.

I can add a third antenna to my truck but with the distance between the 10 and 11 meter antennas being very close to each other and interaction may be a problem.

<PLEASE READ THE FOLLOWING>

I will never have both the 11 and the 10 meter rigs on at the same time.

What happens when 2 antennas that close together in frequency as well as distance apart from each other?

Is there a way to use such an antenna system?

Keep in mind that while driving in a convoy it is not a good idea to have to use antenna A-B switches etc...I would much rather just turn on the rig I need and off the one I do not need at the time.

Thanks for any ideas... BTW, the truck is a 2002 4 door dodge ram with the 11 meter whip mounted using a steakbed hole mount in the front drivers side steak hole. The 2 meter collinear antenna is in the front passenger steak hole.

1215. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 20:35:10 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbhr60ivm1@news.albasani.net>
Source record: 36633

John Smith wrote:

> ...

Level three:

I show up in your neighborhood--I am just joe-blow-citizen ... with me, I have a 1,000,000 rpm LARGE motor and a good sized, bar, neodymium magnet. I affix the middle of the magnet to the shaft of the motor and plug her in!

Meanwhile, inside your home, you pick up a signal around the middle of the am broadcast band. Suspicious, you look out the window and see me with my "rig." You call the "rf police."

They charge me with:

1) Exceeding the legal input power on a xmitter?

2) Shooting rf photons at your home?

3) Creating a disturbance (in the gravitational ether?)

4) All of the above?

5) None of the above?

Regards,
JS

1216. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 21:02:17 UTC
From: Barnard Peters <one@two.com>
Message-ID: <pan.2007.09.03.21.02.12.342157@blueplanet>
Source record: 36534

On Mon, 03 Sep 2007 13:35:10 -0700, John Smith wrote:

> I show up in your neighborhood--I am just joe-blow-citizen ... with me, I
> have a 1,000,000 rpm LARGE motor and a good sized, bar, neodymium magnet.
> I affix the middle of the magnet to the shaft of the motor and plug her
> in!
>
> Meanwhile, inside your home, you pick up a signal around the middle of the
> am broadcast band. Suspicious, you look out the window and see me with my
> "rig." You call the "rf police."
>
> They charge me with:
>
> 1) Exceeding the legal input power on a xmitter?
>
> 2) Shooting rf photons at your home?
>
> 3) Creating a disturbance (in the gravitational ether?)
>
> 4) All of the above?
>
> 5) None of the above?
>
> Regards,
> JS

They would charge you with making a deadly explosive device. The large
motor alone would disinagrate at that amount of rpm. :-)

1217. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 21:11:20 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99A1491B33ED4nonenowhere@61.9.191.5>
Source record: 36535

Ed G <Huckleberry_REMOVE_@bigvalley.net> wrote in
news:Xns99A066D1C4B63HuckleberryREMOVEbig@198.186.192.196:

>
>>
>> Richard, getting clear details is like drawing teeth. I suspect the
>> RV might be fibreglass, and so about as RF transparent as you might
>> get. Further, something hints to me that the grounded ATU is on top
>> of the ladder, so it isn't really grounded.
>>
>> But in the absense of clear details of a single scenario, I can't
>> help.
>>
>
> In my previous experience in newsgroups, I'll agree that getting
> details from those who pose questions here is difficult, and I guess
> I'm as guilty as the rest. However, my original question was
> regarding details of common mode choke filter design and has
> apparently morphed into my RV setup.
>
> The RV is a 31' class C, all fiberglass shell, welded aluminum
> frame, on a Ford E450 chassis and cab up front. Although I realize
> there are many aspects that could cause RFI in the cab area of the
> motorhome, I merely wanted to use a choke filter to see what
> improvement might take place.
>
> The SG-237 tuner does not use a control line, so no filtering
> needed
> here. The DC will be pulled off the back of the motorhome close by,
> and that source, as I previously mentioned, will also be routed
> through a common mode filter.
>
> The antenna feedpoint / loaded base area is about three feet down
> from
> the top of the metal ladder. The metal ladder vertical rails is one
> piece construction, and is bonded at bottom of both rails with 2"
> tinned copper braid to the main chassis rails with pieces running
> about 22" length. All in all, about as good a ground as can be
> obtained under the circumstance.

Ed,

Some thoughts...

In the broad context of a sparse bonded metal frame work, and with your somewhat elevated feedpoint (though not fully described), it would be no surprise if most parts of the structure weren't at elevated RF voltages (as per Richard's summary of the antenna system).

The first steps to a solution might be to try to minimise the potential differences between the radio interfaces, the nearby structure, and the operator. I would be trying to bring the feed line down the ladder, along the chassis, and up the framework to the radio, and to bond it to the conducting structure at 1, 2, or 3 points along the way to try to ensure that the radio and operator are at similar potential to the adjacent conducting structure.

The effect of a choke is almost the opposite, it is to facilitate potential difference across the choke.

I am not saying that there might not be a need for chokes in the solution, but just chucking chokes at it until it works doesn't seem to work systematically through identifying the problem and then designing solutions to the problem.

Many modern radios are particularly sensitive to RF on the DC and microphone interfaces. If you split the radio to use a remote head, that exposes another couple of interfaces to RF.

The loss in 10m of RG58C/U at 14MHz with a load end VSWR of 1.5 is around 0.6dB. Why do you need RG8X, it must be much harder to deal with in a vehicle than RG58?

Owen

1218. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 21:29:07 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <D0%Ci.15363$B25.10579@news01.roc.ny>
Source record: 36536

John Smith wrote:
> John Smith wrote:
>
> > ...
>
> Level three:
>
> I show up in your neighborhood--I am just joe-blow-citizen ... with me,
> I have a 1,000,000 rpm LARGE motor and a good sized, bar, neodymium
> magnet. I affix the middle of the magnet to the shaft of the motor and
> plug her in!
>
> Meanwhile, inside your home, you pick up a signal around the middle of
> the am broadcast band...

I might pick up a signal in the middle of the AM broadcast band but it
won't be yours, you're at 16.7 kHz.

1219. Re: Has anybody ever???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 21:34:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <32vod3dlj4isjt0mkoeg2cctrg4pfceca1@4ax.com>
Source record: 36537

On Mon, 3 Sep 2007 16:06:50 -0400, "merlin-7" <merlin-7@sc.rr.com>
wrote:

>Keep in mind that while driving in a convoy it is not a good idea to have
>to use antenna A-B switches etc...I would much rather just turn on the rig I
>need and off the one I do not need at the time.

Use two relays. Each relay opens the RF path to each antenna when
unpowered. Then energize each relay (appropriately) when a rig is
turned on. These can be cheap relays because they are either always
on or always off (according to the state of either rig).

NOW, if you emphasized us to read this section, and then slip us a
mickey that you "might" need to monitor the other band you are not
working, then shame on you.

73's
Richard Clark, KB7QHC

1220. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 22:02:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <901pd3tfl9s60b11l67ksjong6ndtvajcq@4ax.com>
Source record: 36538

On Mon, 03 Sep 2007 21:29:07 GMT, gwatts <gwatts@frontiernet.net>
wrote:

>John Smith wrote:
>> John Smith wrote:
>>
>> > ...
>>
>> Level three:
>>
>> I show up in your neighborhood--I am just joe-blow-citizen ... with me,
>> I have a 1,000,000 rpm LARGE motor and a good sized, bar, neodymium
>> magnet. I affix the middle of the magnet to the shaft of the motor and
>> plug her in!
>>
>> Meanwhile, inside your home, you pick up a signal around the middle of
>> the am broadcast band...
>
>I might pick up a signal in the middle of the AM broadcast band but it
>won't be yours, you're at 16.7 kHz.

One reason why the FCC gives exams for licenses (and an example of
self-thinning at the shallow end of the genetic pool).

73's
Richard Clark, KB7QHC

1221. Re: How to make a Stationmaster for hf ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 23:28:19 UTC
From: VK3XL <VK3XL.1228e58@radiobanter.com>
Message-ID: <VK3XL.1228e58@radiobanter.com>
Source record: 36543

Thanks Wim, and others for your replies. After looking at the web links you sent i think I will have a go at reconstructing the ring matching thing on the ringo (minus its ring) that I have. Again thanks all.

Mike
VK3XL

--
VK3XL

1222. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-03 23:37:27 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99A0A91E5AB69HuckleberryREMOVEbig@198.186.192.196>
Source record: 36539

>
> The first steps to a solution might be to try to minimise the
> potential differences between the radio interfaces, the nearby
> structure, and the operator. I would be trying to bring the feed line
> down the ladder, along the chassis, and up the framework to the radio,
> and to bond it to the conducting structure at 1, 2, or 3 points along
> the way to try to ensure that the radio and operator are at similar
> potential to the adjacent conducting structure.
>

Actually, that is step one, which is on the project table.
Currently, when operating HF fixed portable, I run the coax out the
coach, on the ground, and back up to the feed point. My plan is to
route it neatly from the radio location, down to the chassis, along the
chassis, out to the ladder and to the feedpoint. I suppose that, alone,
could help in my RF issues. They are not serious issues, but are
annoying at times.

Perhaps I'll reserve my ferrite split beads for a choke filter on my
fixed station antenna when I get to that.

Ed

1223. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-04 00:15:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbi837$it9$1@news.albasani.net>
Source record: 36540

gwatts wrote:

> ...
> I might pick up a signal in the middle of the AM broadcast band but it
> won't be yours, you're at 16.7 kHz.

Really?

A 360 degree rotation is somehow stuck with a divisor?

Do you divide the 360 degree "rotations" of your transmitters sine wave
with a large divisor also? Or, possibly your sine waves are greater
than 360 degrees?

Interesting ...

Regards,
JS

1224. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-04 00:22:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbi8g5$it9$2@news.albasani.net>
Source record: 36541

John Smith wrote:
> gwatts wrote:
>
> > ...
>> I might pick up a signal in the middle of the AM broadcast band but it
>> won't be yours, you're at 16.7 kHz.
>
> Really?
>
> A 360 degree rotation is somehow stuck with a divisor?
>
> Do you divide the 360 degree "rotations" of your transmitters sine wave
> with a large divisor also? Or, possibly your sine waves are greater
> than 360 degrees?
>
> Interesting ...
>
> Regards,
> JS

My error, I was thinking RPS (Rotations Per Second) but wrote rpm--'ya
got me, just not used to those high speed motors :-) ... and you MOST
CERTAINLY pick up my signal now ...

And, no, this motor doesn't come apart at this speed--the metal the
motor is made of came from the UFO crash in Roswell NM ;-)

Regards,
JS

1225. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-04 00:23:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbi8j2$it9$3@news.albasani.net>
Source record: 36542

Richard Clark wrote:

> ...
> One reason why the FCC gives exams for licenses (and an example of
> self-thinning at the shallow end of the genetic pool).
>
> 73's
> Richard Clark, KB7QHC

Actually, I believe 'ya!

You certainly know what you are talking about ...

Regards,
JS

1226. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-04 16:59:24 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fbk2tc$fu0$1@news.jpl.nasa.gov>
Source record: 36545

Ed G wrote:
> I am having a heck of a time locating a source of good information on
> how to make an effective common mode filter using the snap-on type ferrite
> beads such as available at RAdio Shack. Planned usage is for RG-8 coax
> feeding an SGC tuner, with primary operation on 75 & 40 Meters, but
> possibly up through 10M. Any help?
>
>
> Ed K7AAT
http://www.audiosystemsgroup.com/RFI-Ham.pdf will answer a LOT of these sorts of questions. It has a cookbook for building chokes, etc.

The challenge is that the Radio Shack ferrites might be a mix more intended for suppression of VHF spurious signals than HF. I believe that the Radio Shack ones are either #43 or #61. Most of the snap together ones are #43 (optimized for 30 to 400 MHz, i.e. to reduce RFI for FM broadcast and TVI with rabbit ears).

For myself, I use 5 2.4" toroids of #31 material (Fair Rite #2631803802), and run a half dozen turns of the coax through it. It has about 30 dB of attenuation from 2-30 MHz. These run about $5 each in moderate (10-30 pcs) quantity, so the choke is around $25. Get a bunch of people together in a group buy so you can get 1000 of them, and they get down to the $2.50 each range.

http://www.fair-rite.com/

1227. Re: making a common mode filter

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-04 17:00:11 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fbk2uq$fu0$2@news.jpl.nasa.gov>
Source record: 36544

Owen Duffy wrote:
> Ed G <Huckleberry_REMOVE_@bigvalley.net> wrote in
> news:Xns999EC71DC1256HuckleberryREMOVEbig@198.186.192.196:
>
>
>> I am having a heck of a time locating a source of good information
>> on
>>how to make an effective common mode filter using the snap-on type
>>ferrite beads such as available at RAdio Shack. Planned usage is for
>>RG-8 coax feeding an SGC tuner, with primary operation on 75 & 40
>>Meters, but possibly up through 10M. Any help?
>>
>>
>> Ed K7AAT
>>
>
>
> Does that imply that you are going to put the suppression sleeves on the
> coax, but not on the power / control cable?

Better put one on the power cable too...
(writes someone who found this out empirically)
Jim, W6rmk

1228. Re: What is the highest radio frequency used for astronomy? Is it 3,438 GHz?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-04 17:07:35 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fbk3cn$fu0$3@news.jpl.nasa.gov>
Source record: 36546
Cross-posted to: sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

Harold E. Johnson wrote:

>
>
> Hi Tom, we've used plastic lensing since at least the late 60's for focusing
> mundane 4-12 GHz radio waves. Dielectric refraction was used back then to
> extract additional gain from dish antennas by allowing more even
> illumination of the dish without illuminating the area around the dish.
> Harris radio had a patent on it.
>

J.C. Bose used dielectric lenses at 90 GHz back at the end of 19th
century (that is, in the late 1800s) when doing his experiments in Calcutta.

Optical techniques have been used in radio for a very, very long time.

1229. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-04 18:29:07 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fbk85g$s8h$1@news.service.uci.edu>
Source record: 36547

K7ITM wrote:

> I'm left with the impression that JS, at least, hasn't a clue about
> how those little radiometers actually work. (Or perhaps he just
> thinks he's having fun with a little trolling.)

Both are correct, IMO.

ac6xg

1230. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-04 19:42:37 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <NyiDi.67809$ax1.52207@bgtnsc05-news.ops.worldnet.att.net>
Source record: 36548

Ed Cregger wrote:

>
>
> What if all things were true - and false? Personally, I'd just open the
> box and ask the cat. Assuming that it was still alive, that is. <G>
>
> And who was this Schroedinger guy anyway?
>
>
> Ed, NM2K

If Schroedinger was doing his thing today instead of 100 years ago,
would he be heading to a prison cell like Michael Vick?

A great many students have declared that quantum mechanics is evil, but
in today's courts it might be criminal as well.

8-)

73,
Gene
W4SZ

1231. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-04 21:30:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbkiqe$o5q$1@news.albasani.net>
Source record: 36549

Jim Kelley wrote:
>
>
> K7ITM wrote:
>
>> I'm left with the impression that JS, at least, hasn't a clue about
>> how those little radiometers actually work. (Or perhaps he just
>> thinks he's having fun with a little trolling.)
>
> Both are correct, IMO.
>
> ac6xg
>

Actually, you are partially correct. In the cookes radiometer, the
motion cannot be ALL attributed to the radiation pressure. A nichols
radiometer can accurately measure this radiation pressure ... the effect
(photons having mass) is real ...

Regards,
JS

1232. Re: Ideas for Simple Homemade 17 Metre Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-04 23:22:00 UTC
From: nm5k@wt.net
Message-ID: <1188948120.300039.284040@d55g2000hsg.googlegroups.com>
Source record: 36550

On Sep 3, 3:56 am, Andiroo <a.rich...@btinternet.com> wrote:
> All
>
> Can anyone point me to some simple designs for a home made 17 metre
> antenna. I am looking for some simple half wave dipole type designs.

468/18.1mhz=25.85 total feet for a half wave dipole. Divide by two for
each leg.
Feed with 50 ohm coax. Can't get much simpler than that. Can't get
much more
efficient either unless maybe you have to run 500 ft of coax. . :)
MK

1233. inquiry from a newb

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-04 23:40:29 UTC
From: Steve <sdaniel13@speakeasy.net>
Message-ID: <1188949229.874112.302240@o80g2000hse.googlegroups.com>
Source record: 36551

I've been a SWLer for years and am considering getting a ham license. However, I live in an urban area (Brooklyn) and wonder just how effectively I can transmit from here. Big outdoor antennas and ground radials are out of the question.

Obviously I'd be starting out on VHF and UHF frequencies, perhaps with only a modest handheld transceiver. Handhelds look pretty puny, but is this appearance deceptive? Would one allow me to talk to lots of people and learn from them?

Any insights you can share will be greatly appreciated.

Steve

1234. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 00:04:23 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <1188950663.387989.256170@g4g2000hsf.googlegroups.com>
Source record: 36553

Richard Clark wrote:

> The description you offer requires a porous plate which is absent in
> every radiometer that has come down the pike

On the other hand, the absence of porous plates in operating
radiometers tends to cast some doubt on your claim that the plates
must be porous.

> As for the local air, there is none in
> many radiometers that are more sensitive than the Crookes.

> Again, which radiometer? If you are arguing a "perfect" vacuum, then
> like a free lunch, I would agree there's no such thing. The Crookes
> radiometer requires a partial atmosphere to work, other radiometers
> work quite fine with much less.

Depends entirely on what one intends to measure.

> The distinction in the multiplicity of radiometers is significant and
> relates to an effect predicted in Maxwell's work, and exhibited by
> Lebedev; and Nichols, Tear, Hull, and Webb by THEIR radiometers. It
> requires very little more work than stating the surface area and
> rendering the expression of force in the units pascals if one wishes
> to remain within their classical descriptions.
>
> To put a number to it: 0.3 slug per sq. mile (under less than
> demanding conditions)

> If the twins can't cope with the crippling Newtonian math, then one
> might grant them the mental prowess of scaling by area - something
> within the reach of a very special fifth grader. Yet and all, this
> bone that I am tossing them only answers the less than Extra special,
> super duper credit question.
>
> To keep it in pascals in conditions of sunlight, on the equator, at
> noon, on the solstice: 3 µPa (one square meter is implied, but this is
> certainly not the size of any radiometer's vane - hence this number
> should be further reduced by roughly 1/10,000 or 300 pPa). If the
> twins can follow the mathematical progression in the parenthetical
> statement, they should be able to answer the less than Extra special,
> super duper credit question.

There are two possible mechanisms here. One is a momentum exchange
effect which is orders of magnitude smaller than the other and can
only be observed at ultra high vacuum. The other (the one Denny
accurately described) is a radiative molecular heating effect which

creates a differential pressure and as such, can only be observed in at most a partial vacuum. The way to recognize the difference is that the two mechanisms produce their respective forces in opposite directions.

73, ac6xg

1235. Re: Ideas for Simple Homemade 17 Metre Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 00:04:28 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <bPydnZXdR4vPb0DbRVnyiAA@pipex.net>
Source record: 36552

nm5k@wt.net wrote:
> On Sep 3, 3:56 am, Andiroo <a.rich...@btinternet.com> wrote:
>> All
>>
>> Can anyone point me to some simple designs for a home made 17 metre
>> antenna. I am looking for some simple half wave dipole type designs.
>
> 468/18.1mhz=25.85 total feet for a half wave dipole. Divide by two for
> each leg.
> Feed with 50 ohm coax. Can't get much simpler than that. Can't get
> much more
> efficient either unless maybe you have to run 500 ft of coax. . :)
> MK
==========
A current balun near dipole in the shape of ferrite cylinders or ,when
using RG58 type of coax, 7 - 9 windings of the coax on a larger toroid ,
will ensure no RF interference in the shack /house (eg no RF current
flowing along coax braid)
It is even better to use a balanced feeder instead of coax.
You then either need a matching unit for a balance feeder or use a balun
as described above near the transmitter ,connecting coax to feeder
through a dual plastic connecting block .

Personally I would always use a balanced feeder for any wire antenna.

Frank

1236. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 00:17:15 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fbksjc$ir3$1@news.service.uci.edu>
Source record: 36555

John Smith wrote:
> Jim Kelley wrote:
>
>>
>>
>> K7ITM wrote:
>>
>>> I'm left with the impression that JS, at least, hasn't a clue about
>>> how those little radiometers actually work. (Or perhaps he just
>>> thinks he's having fun with a little trolling.)
>>
>>
>> Both are correct, IMO.
>>
>> ac6xg
>>
>
> Actually, you are partially correct.

At the time it was posted, the statment was entirely correct.

jk

1237. Re: inquiry from a newb

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 00:17:48 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <Mr-dndD8BoPuaEDbRVnysAA@pipex.net>
Source record: 36554

Steve wrote:
> I've been a SWLer for years and am considering getting a ham license.
> However, I live in an urban area (Brooklyn) and wonder just how
> effectively I can transmit from here. Big outdoor antennas and ground
> radials are out of the question.
>
> Obviously I'd be starting out on VHF and UHF frequencies, perhaps with
> only a modest handheld transceiver. Handhelds look pretty puny, but is
> this appearance deceptive? Would one allow me to talk to lots of
> people and learn from them?
>
> Any insights you can share will be greatly appreciated.
==========
Suggest you have a look at http://www.hamlan.org/tech/tech.htm.

20m loaded mini-dipole by IK2BCP (length 1.75 metres or 5 3/4 feet)

This is an antenna for QRP (low power) operation , but by using thicker
wire for the coils it will be suitable for higher RF power.

Results with this antenna are positively surprising.

Frank GM0CSZ / KN6WH

1238. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 00:37:03 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <03trd3p43vnni11bimjug4v4iju1svai52@4ax.com>
Source record: 36556

On Wed, 05 Sep 2007 00:04:23 -0000, Jim Kelley <jwkelley@uci.edu>
wrote:

>Richard Clark wrote:
>
>> The description you offer requires a porous plate which is absent in
>> every radiometer that has come down the pike
>
>On the other hand, the absence of porous plates in operating
>radiometers tends to cast some doubt on your claim that the plates
>must be porous.

Not "my claim," my report. The claim they must be porous arrives through the math necessary to balance the kinetic forces. As that math balance (from Einstein and Reynolds) has never been achieved, then Denny's description has never been proven. Less than porous vanes only further removes such "explanations" from the realm of proof. In fact, as a description, Denny's is incomplete insofar as there is no description of the turbulence created in the near vacuum that serves as the "thrust" for the vanes which is missing in a complete vacuum. The "thrust" is optimal only for porous plates, as an explanation; and that explanation, as I've said, does not fully balance.

Now, if we simply move to another radiometer (Nichols, Tear, Hull, and Webb already recited) without that partial vacuum, the vanes still move, and expressely by Radiation Pressure. And the problem remains as to the balance of forces. In essence, these instruments indicate, not measure.

>> As for the local air, there is none in
>> many radiometers that are more sensitive than the Crookes.
>
>> Again, which radiometer? If you are arguing a "perfect" vacuum, then
>> like a free lunch, I would agree there's no such thing. The Crookes
>> radiometer requires a partial atmosphere to work, other radiometers
>> work quite fine with much less.
>
>Depends entirely on what one intends to measure.

The coy context of the thread was measuring the mass of a Photon. Absolutely no SI Units have been named or any quantitative values offered (the rather standard omission from claims made here). However, feel free to introduce your own side thread's goal or even offer a guess (your own quatitative value for the mass). Such additional discussion would vastly elevate the inane repetition of claims above

the level of "Photons have the flavor of Crï¿½me brï¿½lï¿½e."

73's
Richard Clark, KB7QHC

1239. Re: Ideas for Simple Homemade 17 Metre Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 00:50:57 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <nIudnVTa1u35YEDbnZ2dnUVZ_u6rnZ2d@comcast.com>
Source record: 36557

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:bPydnZXdR4vPb0DbRVnyiAA@pipex.net...
> nm5k@wt.net wrote:
>> On Sep 3, 3:56 am, Andiroo <a.rich...@btinternet.com> wrote:
>>> All
>>>
>>> Can anyone point me to some simple designs for a home made 17 metre
>>> antenna. I am looking for some simple half wave dipole type designs.
>>
>> 468/18.1mhz=25.85 total feet for a half wave dipole. Divide by two for
>> each leg.
>> Feed with 50 ohm coax. Can't get much simpler than that. Can't get
>> much more
>> efficient either unless maybe you have to run 500 ft of coax. . :)
>> MK
> ==========
> A current balun near dipole in the shape of ferrite cylinders or ,when
> using RG58 type of coax, 7 - 9 windings of the coax on a larger toroid ,
> will ensure no RF interference in the shack /house (eg no RF current
> flowing along coax braid)
> It is even better to use a balanced feeder instead of coax.
> You then either need a matching unit for a balance feeder or use a balun
> as described above near the transmitter ,connecting coax to feeder
> through a dual plastic connecting block .
>
> Personally I would always use a balanced feeder for any wire antenna.
>
>
> Frank

Use 50 Ohm coax (RG8X, or better) unless you are in love with your antenna tuner. I have tried it with and without a balun, and can't really tell any difference. However, right now there is a 1:1 current balun at the feed point. Trim the length for best SWR, 25.85 might be a bit long. I am using #14 stranded/insulated wire.

Tam/WB2TT

1240. Re: Ideas for Simple Homemade 17 Metre Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 02:02:21 UTC
From: nm5k@wt.net
Message-ID: <1188957741.052569.316390@57g2000hsv.googlegroups.com>
Source record: 36558

On Sep 4, 7:04 pm, Highland Ham <abcgm0csz.kn6wh...@dsl.pipex.com>
wrote:

>
> ==========
> A current balun near dipole in the shape of ferrite cylinders or ,when
> using RG58 type of coax, 7 - 9 windings of the coax on a larger toroid ,
> will ensure no RF interference in the shack /house (eg no RF current
> flowing along coax braid)

True. I usually just roll a choke from the coax. You don't need a
toroid for single band use. Or even 20-10 triband use for that
matter.. May have problems trying to do 80-10 well with a single
choke though.

> It is even better to use a balanced feeder instead of coax.

Only if one intended to use it for other bands.
For single band use it would probably have a higher system efficiency
using coax, being most that run ladder line use tuners, etc
which add some loss to the system.

> You then either need a matching unit for a balance feeder or use a balun
> as described above near the transmitter ,connecting coax to feeder
> through a dual plastic connecting block .

Dunno, I prefer to keep things simple. I would usually prefer a 50 ohm
radio, feeding a 50 ohm feedline, to a 50 ohm antenna.
Using a 50 ohm radio to a balun or tuner feeding a 450 ohm feedline to
a
50 ohm antenna seems kind of silly to me in comparison, if for a
single
band. But to each his own I guess..
BTW, I have compared the two, and the coax fed always slightly beat
the
ladder line/tuner fed system as far as efficiency on any HF band.
Of course, my coax runs are never over a 100 ft.. Often half that.
But when using a 989c tuner and ladder line, I could never get quite
the
system efficiency vs using coax, even using the most careful tuning
methods.
IE: using the minimum inductance needed to get a match.

>
> Personally I would always use a balanced feeder for any wire antenna.

I'm usually about the opposite. The only time I use ladder line is
if
I intend to use a single wire for multiple bands. In that case, I can
see it.
Or if maybe I had to run a line several hundred feet, but I've
never had to do that yet..
But for single band use, it's going to be very hard to beat the
efficiency of a coax fed system with any type of ladder line system,
unless maybe you use the "Cecil" no tuner method.
And then.. it's more work, and the feedlines have to be off the
ground,
coiled just so, etc..... :/ The coax can be running anywhere. Even
in standing water.. On the lower/mid HF bands where I'm usually at,
the losses using coax are so low as to be a non issue. Trying to
beat the loss by using ladder line is not going to make any noticable
difference as far as the line itself. But.. Adding a matching device
almost always will. :(I can actually see it on receive just A/B
comparing using the S meter readings as an indicator.
I have no problems with ladder line, but the usual claims of
better performance isn't really true in the majority of cases on HF.
Often, quite the opposite, because of the matching devices usually
used with ladder line systems. Their loss usually overshadows the
slightly lower feedline loss.

Now, on UHF feeding say a TV corner reflector-yagi thing I use for
ATV, I prefer the twin lead.
Unless it gets wet, it's gonna beat most runs of coax as far as the
system loss. In that case, the matching devices don't overshadow
the higher more noticable coax losses at those higher frequencies.
MK

1241. Re: inquiry from a newb

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 02:55:08 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns99A1E951A7D25mcoslocomcastnet@216.196.97.136>
Source record: 36559

Steve <sdaniel13@speakeasy.net> wrote in news:1188949229.874112.302240
@o80g2000hse.googlegroups.com:

> I've been a SWLer for years and am considering getting a ham license.
> However, I live in an urban area (Brooklyn) and wonder just how
> effectively I can transmit from here. Big outdoor antennas and ground
> radials are out of the question.
>
> Obviously I'd be starting out on VHF and UHF frequencies, perhaps with
> only a modest handheld transceiver. Handhelds look pretty puny, but is
> this appearance deceptive? Would one allow me to talk to lots of
> people and learn from them?

Yo Steve!

March right off and get that license. For VHF and UHF, there are repeaters to use, And I assume that Brooklyn and the surrounds has no shortage of them. I don't know hown many are private, but there has to be some public ones. As for HF, there are options even there. I talk to Hams from Brooklyn and thereabouts on even 75/80 meters.

There may even be clubs that have club stations located outside the city. Keeping in mind that if they have folks to Elmer you , you can get in a little HF work under a control Op.

- 73 de Mike KB3EIA -

1242. Re: inquiry from a newb

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 02:58:39 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns99A1E9EA3ED53mcoslocomcastnet@216.196.97.136>
Source record: 36560

Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in
news:Mr-dndD8BoPuaEDbRVnysAA@pipex.net:

> Steve wrote:
>> I've been a SWLer for years and am considering getting a ham license.
>> However, I live in an urban area (Brooklyn) and wonder just how
>> effectively I can transmit from here. Big outdoor antennas and ground
>> radials are out of the question.
>>
>> Obviously I'd be starting out on VHF and UHF frequencies, perhaps
>> with only a modest handheld transceiver. Handhelds look pretty puny,
>> but is this appearance deceptive? Would one allow me to talk to lots
>> of people and learn from them?
>>
>> Any insights you can share will be greatly appreciated.
> ==========
> Suggest you have a look at http://www.hamlan.org/tech/tech.htm.
>
> 20m loaded mini-dipole by IK2BCP (length 1.75 metres or 5 3/4 feet)
>
> This is an antenna for QRP (low power) operation , but by using
> thicker wire for the coils it will be suitable for higher RF power.
>
> Results with this antenna are positively surprising.

Absolutely. Sometimes we get so caught up in big balls antennas
that we discount the little ones.

... Gaw, did I actually say that? ;^)

Point is, if you can't put up a 40 meter beam, don't let it keep
you from putting up a modest antenna.

- 73 de Mike KB3EIA -

1243. Re: inquiry from a newb

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 03:12:17 UTC
From: Topaz305RK <k7sam@arrl.net>
Message-ID: <LdWdnX0P-tnNg0PbnZ2dnUVZ_uGknZ2d@vnet-inc.com>
Source record: 36561

"Mike Coslo" <mcoslo@youknow.comcast.net> wrote in message
news:Xns99A1E951A7D25mcoslocomcastnet@216.196.97.136...
> Steve <sdaniel13@speakeasy.net> wrote in news:1188949229.874112.302240
> @o80g2000hse.googlegroups.com:
>
>> I've been a SWLer for years and am considering getting a ham license.
>> However, I live in an urban area (Brooklyn) and wonder just how
>> effectively I can transmit from here. Big outdoor antennas and ground
>> radials are out of the question.
>>
>> Obviously I'd be starting out on VHF and UHF frequencies, perhaps with
>> only a modest handheld transceiver. Handhelds look pretty puny, but is
>> this appearance deceptive? Would one allow me to talk to lots of
>> people and learn from them?
>
> Yo Steve!
>
> March right off and get that license. For VHF and UHF, there are
> repeaters to use, And I assume that Brooklyn and the surrounds has no
> shortage of them. I don't know hown many are private, but there has to be
> some public ones. As for HF, there are options even there. I talk to Hams
> from Brooklyn and thereabouts on even 75/80 meters.
>
> There may even be clubs that have club stations located outside the
> city. Keeping in mind that if they have folks to Elmer you , you can get
> in a little HF work under a control Op.
>
> - 73 de Mike KB3EIA -
>
Have worked a ton of Brooklyn hams from here in northeast Montana.
I am sure a lot of them are in the same boat as you for antennas.
If you can find a club or group, get involved with them. There will be folks
who can give you lots of advice.
Jump in, get your feet wet and enjoy.

Sam - K7SAM

1244. Re: Ideas for Simple Homemade 17 Metre Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 05:37:41 UTC
From: Andiroo <a.richman@btinternet.com>
Message-ID: <1188970661.229008.19270@19g2000hsx.googlegroups.com>
Source record: 36562

On Sep 5, 3:02 am, n...@wt.net wrote:
> On Sep 4, 7:04 pm, Highland Ham <abcgm0csz.kn6wh...@dsl.pipex.com>
> wrote:
>
>
>
> > ==========
> > A current balun near dipole in the shape of ferrite cylinders or ,when
> > using RG58 type of coax, 7 - 9 windings of the coax on a larger toroid ,
> > will ensure no RF interference in the shack /house (eg no RF current
> > flowing along coax braid)
>
> True. I usually just roll a choke from the coax. You don't need a
> toroid for single band use. Or even 20-10 triband use for that
> matter.. May have problems trying to do 80-10 well with a single
> choke though.
>
> > It is even better to use a balanced feeder instead of coax.
>
> Only if one intended to use it for other bands.
> For single band use it would probably have a higher system efficiency
> using coax, being most that run ladder line use tuners, etc
> which add some loss to the system.
>
> > You then either need a matching unit for a balance feeder or use a balun
> > as described above near the transmitter ,connecting coax to feeder
> > through a dual plastic connecting block .
>
> Dunno, I prefer to keep things simple. I would usually prefer a 50 ohm
> radio, feeding a 50 ohm feedline, to a 50 ohm antenna.
> Using a 50 ohm radio to a balun or tuner feeding a 450 ohm feedline to
> a
> 50 ohm antenna seems kind of silly to me in comparison, if for a
> single
> band. But to each his own I guess..
> BTW, I have compared the two, and the coax fed always slightly beat
> the
> ladder line/tuner fed system as far as efficiency on any HF band.
> Of course, my coax runs are never over a 100 ft.. Often half that.
> But when using a 989c tuner and ladder line, I could never get quite
> the
> system efficiency vs using coax, even using the most careful tuning
> methods.
> IE: using the minimum inductance needed to get a match.

>
>
>
> > Personally I would always use a balanced feeder for any wire antenna.
>
> I'm usually about the opposite. The only time I use ladder line is
> if
> I intend to use a single wire for multiple bands. In that case, I can
> see it.
> Or if maybe I had to run a line several hundred feet, but I've
> never had to do that yet..
> But for single band use, it's going to be very hard to beat the
> efficiency of a coax fed system with any type of ladder line system,
> unless maybe you use the "Cecil" no tuner method.
> And then.. it's more work, and the feedlines have to be off the
> ground,
> coiled just so, etc..... :/ The coax can be running anywhere. Even
> in standing water.. On the lower/mid HF bands where I'm usually at,
> the losses using coax are so low as to be a non issue. Trying to
> beat the loss by using ladder line is not going to make any noticable
> difference as far as the line itself. But.. Adding a matching device
> almost always will. :(I can actually see it on receive just A/B
> comparing using the S meter readings as an indicator.
> I have no problems with ladder line, but the usual claims of
> better performance isn't really true in the majority of cases on HF.
> Often, quite the opposite, because of the matching devices usually
> used with ladder line systems. Their loss usually overshadows the
> slightly lower feedline loss.
>
> Now, on UHF feeding say a TV corner reflector-yagi thing I use for
> ATV, I prefer the twin lead.
> Unless it gets wet, it's gonna beat most runs of coax as far as the
> system loss. In that case, the matching devices don't overshadow
> the higher more noticable coax losses at those higher frequencies.
> MK

All

Welll once again this proves the theory - two amateurs = three opions.
However, this is a very useful discussion and the 25ft (ish) simple
dipole seems to be the easiest thing to work with and the length is
very achieveable in the space. I therefore have to get to a decision
on what i use in the centre. I estimate from the centre of the antenna
to the shack would be approx 50-75ft max even if i run it neatly
around the walls. I am happy to use an ATU to achieve a perfect match.
So what do i go for?

Secondly, is there an optimal height. My half size G5RV is at the top
of the 30 ft pole so this would need to be below that? Also does it
matter if it is on a slight incline with the lowest part closest to
the house?

Many thanks for all the great advice

Andy

1245. Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 05:39:21 UTC
From: Andiroo <a.richman@btinternet.com>
Message-ID: <1188970761.569566.3210@y42g2000hsy.googlegroups.com>
Source record: 36563

All

Is it possible to check the quality of a coax connection to a PL259 plug without taking the plug apart - i.e. simply by using a multimeter?

Many thanks

Andy

1246. Re: Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 06:29:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <13jsd3pgko247eppcpm6vrl18asftvdmhg@4ax.com>
Source record: 36564

On Tue, 04 Sep 2007 22:39:21 -0700, Andiroo <a.richman@btinternet.com>
wrote:

>All
>
>Is it possible to check the quality of a coax connection to a PL259
>plug without taking the plug apart - i.e. simply by using a
>multimeter?

Hi Andy,

With both ends in your lap:
shells, end to end - very low Ohms;
pins, end to end - very low Ohms;
shell to pin, either end - infinite Ohms.

73's
Richard Clark, KB7QHC

1247. Re: Ideas for Simple Homemade 17 Metre Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 08:23:50 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <fOb8zfHWem3GFAJc@ifwtech.co.uk>
Source record: 36565

Highland Ham wrote:
>nm5k@wt.net wrote:
>> On Sep 3, 3:56 am, Andiroo <a.rich...@btinternet.com> wrote:
>>> All
>>>
>>> Can anyone point me to some simple designs for a home made 17 metre
>>> antenna. I am looking for some simple half wave dipole type designs.
>> 468/18.1mhz=25.85 total feet for a half wave dipole. Divide by two
>>for
>> each leg.
>> Feed with 50 ohm coax. Can't get much simpler than that. Can't get
>> much more
>> efficient either unless maybe you have to run 500 ft of coax. . :)
>> MK
>==================================
>A current balun near dipole in the shape of ferrite cylinders or ,when
>using RG58 type of coax, 7 - 9 windings of the coax on a larger toroid ,
>will ensure no RF interference in the shack /house (eg no RF current
>flowing along coax braid)
>It is even better to use a balanced feeder instead of coax.
>You then either need a matching unit for a balance feeder or use a balun
>as described above near the transmitter ,connecting coax to feeder
>through a dual plastic connecting block .
>
>Personally I would always use a balanced feeder for any wire antenna.

That reel of cable marked "balanced feeder" is a myth!

Twin feeder is not self-balancing. It never will be "balanced" unless your installation has MADE it balanced.

As it comes off the reel, twin feeder is capable of carrying unwanted common-mode currents just as easily as the intended differential mode. All practical antenna installations are unsymmetrical (either the antenna, its environment or both) so there will always be some unwanted common-mode current. Common-mode current will cause the feedline to radiate and will conduct unwanted RF back into the shack, where it often flows through into your house wiring... all of which is regarded as a Bad Thing.

Twin feeder will only become more "balanced" if you - the user - have taken some positive action to suppress the common-mode current. When you install a typical link-coupled ATU designed for "balanced" feedline, the low capacitance across the link coupling creates a high impedance to block the entry of common-mode current into the shack. A suitable balun

would also create a high impedance to block the common-mode current, so in this case you would need a choke balun (aka feedline choke or line isolator).

When you insert this high impedance in the path of the common-mode current, the current distribution over the whole antenna-feedline system readjusts itself to take account of this new factor. The new current distribution will be forced towards better symmetry on the antenna itself, with a smaller common-mode current on the feedline... so the feedline has now become more "balanced".

What should take the credit for this good result? It was the ATU or balun that you installed - so all the credit goes to you. The so-called "balanced" feeder deserves no credit at all, for it did nothing more than react to the change that you made.

Many people confuse the cause and effect here. If they believe that the feedline is in some sense "ready balanced", they will install a suitable ATU or balun "because that's what balanced feedline needs". Very often, it all works out OK because they have done exactly the right things, even though they misunderstand the reasons. But if it doesn't quite work, and something more is needed to suppress the common-mode currents, this wrong thinking comes completely unstuck.

Coaxial feedline has the major advantage that you can insert a choke balun right at the feedpoint, which substantially prevents common-mode current from being launched onto the outer surface of the cable[1]. The entire current distribution will then change, to take account of the fact that you have forced a minimum in the common-mode current at the feedpoint. Because the feedline is in the near field of the antenna, radiative coupling may cause common-mode current to reappear on the surface of the coax, starting with a new maximum a quarter-wavelength down the line from the feedpoint. But the size of this maximum is generally much smaller, and so too will be the residual current arriving at the shack - where, if needed, you can insert a second feedline choke. In really desperate situations, you can have as many common-mode chokes along the coax as you like.

With twin feeder, you don't have those options. Your only practical options are at the ATU, or where the twin feeder makes a transition into coax. That restriction makes it even less likely that twin feeder will ever be truly "balanced".

Bottom line: twin feeder has many advantages, especially for multiband operation... but automatic balance certainly isn't one of them.

[1] In coaxial cable, the inside and outside of the shield behave as two independent conductors for RF current, giving a total of three current pathways. The centre conductor and the inside of the shield have very tight coupling between their electric and magnetic fields, which ensures that their RF currents are exactly equal and opposite (the differential mode) and their net field on those two conductors remains

completely inside the cable. The third conductor is the outside of the shield, and behaves a a single fat wire carrying an RF current that is totally independent of what's happening inside. Although strictly speaking this is not a common-mode current, that's what it is generally called by analogy with twin feeder.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1248. Re: inquiry from a newb

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 11:26:11 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <jbg2r4-pkh.ln1@p400bob.personal.cox.net>
Source record: 36568

Hi Steve

Keep in mind that there are many many facets to amateur radio, not all needing large or even effective antennas. You mentioned handhelds. Some people use these through very simple directive antennas for satellite access. If you are into keyboarding, PSK31 around the world a simple antenna on 20m and 10-20W will do it. You can disguise it, tune a rain gutter or even make a loaded device only a few feet long.

Don't be afraid either, to go for a drive out into the country and setup on top of a hill.

Go into the hobby wherever it interests you. Just moderate your antenna size/shape/location accordingly.

Cheers Bob W5/VK2YQA

Steve wrote:
>
> I've been a SWLer for years and am considering getting a ham license.
> However, I live in an urban area (Brooklyn) and wonder just how
> effectively I can transmit from here. Big outdoor antennas and ground
> radials are out of the question.
>
> Obviously I'd be starting out on VHF and UHF frequencies, perhaps with
> only a modest handheld transceiver. Handhelds look pretty puny, but is
> this appearance deceptive? Would one allow me to talk to lots of
> people and learn from them?
>
> Any insights you can share will be greatly appreciated.
>
> Steve
>

1249. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 11:33:11 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1188991991.794484.102380@y42g2000hsy.googlegroups.com>
Source record: 36566

>
> >On the other hand, the absence of porous plates in operating
> >radiometers tends to cast some doubt on your claim that the plates
> >must be porous.
>
> Not "my claim," my report. The claim they must be porous arrives
> through the math necessary to balance the kinetic forces. >
>> Again, which radiometer? If you are arguing a "perfect" vacuum, then
> >> like a free lunch, I would agree there's no such thing. The Crookes
> >> radiometer requires a partial atmosphere to work, other radiometers
> >> work quite fine with much less.
>
> >Depends entirely on what one intends to measure.
>

Despite the photon torpedoes fired at me, I have not seen a convincing physics experiment that deflates my previous arguement...

Where the F=MA arguement fails in a radiometer is that the photons impact both sides of the paddles leaving a zero net force for rotation...

The fact that a Crookes Radiometer requires an atmosphere is proof of its mode of operation. The fact that it has to be a partial vacuum further proves how it operates (more air density means too much air drag to allow rotation by the weak local differential pressure across the paddle)...

Those who reject local differential pressure changes due to local heating by claiming the pressure in the bulb is static ignore the factor of time in molecular exchange of thermal energy gains... Carrying their argument to the logical end means sun heating cannot cause the winds to ever blow across the ground because the net air pressure of Terra is static...

denny
It's 10PM somewhere, have you hugged your radio today?

1250. Re: Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 11:34:14 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <nqg2r4-plh.ln1@p400bob.personal.cox.net>
Source record: 36569

Damn, I knew I was missing something - no lap... <grin>

It is also worthwhile looking for signs of corrosion/water ingress etc
and wriggling the plug/connection as you use the Richard method. Stray
bits of wire can reach out and ruin your apparent resistance. (Which we
know of course is useless...)

(Apologies for using your post so flagrantly Richard...)

Cheers Bob VK2YQA

Richard Clark wrote:
>> Is it possible to check the quality of a coax connection to a PL259
>> plug without taking the plug apart - i.e. simply by using a
>> multimeter?
>
> With both ends in your lap:

1251. Re: Ideas for Simple Homemade 17 Metre Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 11:39:37 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <bY6dnW6CWtinCEPbnZ2dneKdnZydnZ2d@pipex.net>
Source record: 36567

Ian White GM3SEK wrote:

>> Personally I would always use a balanced feeder for any wire antenna.
==========
> That reel of cable marked "balanced feeder" is a myth!
>
> Twin feeder is not self-balancing. It never will be "balanced" unless
> your installation has MADE it balanced.
>
> As it comes off the reel, twin feeder is capable of carrying unwanted
> common-mode currents just as easily as the intended differential mode.
> All practical antenna installations are unsymmetrical (either the
> antenna, its environment or both) so there will always be some unwanted
> common-mode current. Common-mode current will cause the feedline to
> radiate and will conduct unwanted RF back into the shack, where it often
> flows through into your house wiring... all of which is regarded as a
> Bad Thing.
>
> Twin feeder will only become more "balanced" if you - the user - have
> taken some positive action to suppress the common-mode current. When you
> install a typical link-coupled ATU designed for "balanced" feedline, the
> low capacitance across the link coupling creates a high impedance to
> block the entry of common-mode current into the shack. A suitable balun
> would also create a high impedance to block the common-mode current, so
> in this case you would need a choke balun (aka feedline choke or line
> isolator).
>
> When you insert this high impedance in the path of the common-mode
> current, the current distribution over the whole antenna-feedline system
> readjusts itself to take account of this new factor. The new current
> distribution will be forced towards better symmetry on the antenna
> itself, with a smaller common-mode current on the feedline... so the
> feedline has now become more "balanced".
etc
========================
Ian , You are right ,I should have used the term 'twin feeder' instead
of 'balanced feeder'. Tnx for the correction.

In my situation the twin feeder from the dipole comes through a double
concrete block wall ,runs over the loft ,through the plaster board
ceiling (meeting very few metal parts) into the shack . No RF
interference anywhere in the house ,operating with approx 100 W PEP on
any of the HF bands between 3.5 - 29.7 MHz
I intend to make an RF current probe (2 half ring ferrite parts -diode
-connected to a DVM) to see whether there is any unbalance current .

This is more sensitive than taking the difference between measuring individual currents in the feeder lines.

My next activity will be to extend the feeder to a suitable length (Cecil style) such that I 'll be able also to operate on Top Band (1.8 -2.0 MHz) ,the dipole being 2 times 21.35 metres (2 x 70 feet)
With a twin feeder the actual length of the dipole is not critical , however in order to get a reasonably high current (low impedance) at the matching unit (of the E-Zee Match variety and the like) it is important that the total length of half the dipole plus the feeder is about an odd number of quarter wave lengths at the operating frequency .
The velocity factor of the 450 Ohms twin feeder I use is published to be 0.99 ,so for the above purpose it can be taken as 1.
This total length is more critical at the lower frequency HF bands because of the higher wavelength.

Frank GM0CSZ / KN6WH

1252. Re: Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 12:12:23 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <v8udnU9m0aNxAUPbnZ2dnUVZ8vqdnZ2d@pipex.net>
Source record: 36570

>> Is it possible to check the quality of a coax connection to a PL259
>> plug without taking the plug apart - i.e. simply by using a
>> multimeter?
>
> Hi Andy,
>
> With both ends in your lap:
> shells, end to end - very low Ohms;
> pins, end to end - very low Ohms;
> shell to pin, either end - infinite Ohms.
==========
The above is an electrical contact/insulation (DC) check

To check the quality of the complete coax cable including the plug(s)
a 'coax loss' check especially when operating at the higher frequencies
is important.

Some antenna analysers (like the MFJ 259/269) have this coax loss
measuring facility. These instruments enable the user to change
frequency which shows the overall quality of coax + fitted plugs.

The best type of PL259 plug is the one with a cable entry arrangement as
in N-type plugs . This provides an excellent and simple braid connection
,without having to apply heat other than soldering the centre conductor
to the top of the pin .
These plugs are somewhat more expensive than traditional PL259 plugs
(equivalent US$ 6 in the UK) but imho it is worth the expenditure.

Frank GM0CSZ / KN6WH

1253. Re: Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 15:04:32 UTC
From: Andiroo <a.richman@btinternet.com>
Message-ID: <1189004672.355388.8520@k79g2000hse.googlegroups.com>
Source record: 36571

On Sep 5, 1:12 pm, Highland Ham <abcgm0csz.kn6wh...@dsl.pipex.com>
wrote:
> >> Is it possible to check the quality of a coax connection to a PL259
> >> plug without taking the plug apart - i.e. simply by using a
> >> multimeter?
>
> > Hi Andy,
>
> > With both ends in your lap:
> > shells, end to end - very low Ohms;
> > pins, end to end - very low Ohms;
> > shell to pin, either end - infinite Ohms.
>
> ==========
> The above is an electrical contact/insulation (DC) check
>
> To check the quality of the complete coax cable including the plug(s)
> a 'coax loss' check especially when operating at the higher frequencies
> is important.
>
> Some antenna analysers (like the MFJ 259/269) have this coax loss
> measuring facility. These instruments enable the user to change
> frequency which shows the overall quality of coax + fitted plugs.
>
> The best type of PL259 plug is the one with a cable entry arrangement as
> in N-type plugs . This provides an excellent and simple braid connection
> ,without having to apply heat other than soldering the centre conductor
> to the top of the pin .
> These plugs are somewhat more expensive than traditional PL259 plugs
> (equivalent US$ 6 in the UK) but imho it is worth the expenditure.
>
> Frank GM0CSZ / KN6WH

All

More on the nature of the problem. I have basically fitted a 1/2 size
G5RV. Its fitted at 30 ft high between a pole at the end of the yard
and the chimney at approx 30 ft high. The ladder line falls pretty
much vertically except for the very end where i have had to divert it
away from a steel cast iron style balcony which surrounds a roof
terrace on the first floor. I figured it would not be good to brush
alongside the balcony as its metal.

Anyway, i am getting some very weird SWR readings even when i am using
my automatic ATU (LDG Z-100. These range from close to 1.1:1 on

40metres all the way up to 3.1: 1 in the middle of the 20 metre band. I am trying to work out where the problem may lie. So far i have come up wiith:

1) its just the way the antenna works and the ATU cant do any better?
2) the ATU is not working properly (but it seems to get a decent match elsewhere)?
3) there is a problem with the plugs (would this appear to make a difference only on some frequencies)?
4) somehow the stell balcony / balustrade is causing a problem even though i am keeping the ladder line approx 12 inches away from it. Also would this only cause a problem on 20M?
5) running the coax along the steel balustratde and into the house is causing a problem (is this possible)?

Confounding factor is that it seems to be working ok even with the high SWR and i have made some decent contacts on both 40 and 20 metres.

I thought i should start with the plugs but any other thoughts welcome - all very odd!!

Regards

Andy

1254. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 16:36:08 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1189010168.306454.168840@d55g2000hsg.googlegroups.com>
Source record: 36572

On 5 Sep, 04:33, Denny <k...@mailblocks.com> wrote:
> > >On the other hand, the absence of porous plates in operating
> > >radiometers tends to cast some doubt on your claim that the plates
> > >must be porous.
>
> > Not "my claim," my report. The claim they must be porous arrives
> > through the math necessary to balance the kinetic forces. >
> >> Again, which radiometer? If you are arguing a "perfect" vacuum, then
> > >> like a free lunch, I would agree there's no such thing. The Crookes
> > >> radiometer requires a partial atmosphere to work, other radiometers
> > >> work quite fine with much less.
>
> > >Depends entirely on what one intends to measure.
>
> Despite the photon torpedoes fired at me, I have not seen a convincing
> physics experiment that deflates my previous arguement...
>
> Where the F=MA arguement fails in a radiometer is that the photons
> impact both sides of the paddles leaving a zero net force for
> rotation...
>
> The fact that a Crookes Radiometer requires an atmosphere is proof of
> its mode of operation. The fact that it has to be a partial vacuum
> further proves how it operates (more air density means too much air
> drag to allow rotation by the weak local differential pressure across
> the paddle)...
>
> Those who reject local differential pressure changes due to local
> heating by claiming the pressure in the bulb is static ignore the
> factor of time in molecular exchange of thermal energy gains...
> Carrying their argument to the logical end means sun heating cannot
> cause the winds to ever blow across the ground because the net air
> pressure of Terra is static...
>
> denny
> It's 10PM somewhere, have you hugged your radio today?

Perhaps people should take look at other things that creat radiation!
For instance the explosion from a energy container such as a
transformer feeding a spark plug.
The frequency band is widespread leaving time varient current,
capacitance and inductance and neglecting resonant lengths. Can a
capacitance store a particle or can it blow away a particle formed on
its own material?Time varient obviously dependes on the size of the

capacitor therefore the time current is applied to the capacitor is
irrelevent.
I have left off references to icecream, snorkels e.t.c. even tho
apparently they are necessary.
Art

1255. Re: Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 17:34:41 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <F92dne7Jr6c_dUPbnZ2dnUVZ_tGonZ2d@comcast.com>
Source record: 36573

"Andiroo" <a.richman@btinternet.com> wrote in message
news:1188970761.569566.3210@y42g2000hsy.googlegroups.com...
> All
>
> Is it possible to check the quality of a coax connection to a PL259
> plug without taking the plug apart - i.e. simply by using a
> multimeter?
>
> Many thanks
>
> Andy
>
In a newly installed connector, the most common fault, by far, is a short from the center conductor to shield. Also, make sure that the opening in the center pin is completely filled with solder. For small coax, I usually stuff short pieces of heavier wire in there before soldering. You need a fairly large iron to solder the shield. I found a ~200 W soldering gun works OK.

Tam/WB2TT

1256. Re: kelp is good for you

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 17:58:09 UTC
From: Mark@TayleorRobesin.org
Message-ID: <lfrtd3dopf83vmabbv8bf5fuhig3dlton8@4ax.com>
Source record: 36574
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

On Wed, 15 Aug 2007 16:27:20 -0400, Mark@TayleorRobesin.org wrote:

>On Sun, 12 Aug 2007 14:54:46 -0700, an_old_friend
><konstans@hotmail.com> wrote:
>
>>On Aug 12, 5:50 pm, "kb9rqz" <kbp...@punce.net> wrote:
>>> 1) I was draft into the US Army.
>>never said that
>>
>>> 2) I is a member of the Chemcal Cops
>>
>>I said in correect gramaur
>>
>>> 3) The military wont let me retire.
>>
>>never said that either
>>
>>> 4) I dosn't serve under the name 'Mark Morgan but that's okay cuz theFBI,
>>> DOD, and CIA have al todl me I candodit.
>>
>>did not say that either
>>
>>> 5) I is on-the-lam from stalking former marines and fatal
>>> atraction four ex-shemale wife almoney
>>
>>absolutely never said that nor is it true
>>
>>> 6) I was recenty, paying $5/hr. to acess my ISP
>>
>>no not rrecently
>>
>>> 7) I has a 248 IQ, but cant figre out how touse a spel checker.
>>
>>wrong again
>>
>>> 8) I is a bi-sexual Pagan male ham who like to be spanked.
>>
>>true enough
>>
>>> 9) I can't find any action on the military base in Central IL, so I hav to
>>> ask the peple on th USNET.
>>nope
>>

>>on in 9 oh fake
>
>"one useless man is disgrace 2 become a law firm 3 or more become a congress"
>adams
>
>woger you are a Congress all in your own head
>
>http://kb9rqz.bravejournal.com/
>
>G

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

1257. Re: kelp is good for you

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 17:58:09 UTC
From: Mark@TayleorRobesin.org
Message-ID: <bfrtd31jgiv1vlghh8ci1h6n9sop3fcscn@4ax.com>
Source record: 36575
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.swap

On Sun, 12 Aug 2007 14:54:46 -0700, an_old_friend
<konstans@hotmail.com> wrote:

>On Aug 12, 5:50 pm, "kb9rqz" <kbp...@punce.net> wrote:
>> 1) I was draft into the US Army.
>never said that
>
>> 2) I is a member of the Chemcal Cops
>
>I said in correect gramaur
>
>> 3) The military wont let me retire.
>
>never said that either
>
>> 4) I dosn't serve under the name 'Mark Morgan but that's okay cuz theFBI,
>> DOD, and CIA have al todl me I candodit.
>
>did not say that either
>
>> 5) I is on-the-lam from stalking former marines and fatal
>> atraction four ex-shemale wife almoney
>
>absolutely never said that nor is it true
>
>> 6) I was recenty, paying $5/hr. to acess my ISP
>
>no not rrecently
>
>> 7) I has a 248 IQ, but cant figre out how touse a spel checker.
>
>wrong again
>
>> 8) I is a bi-sexual Pagan male ham who like to be spanked.
>
>true enough
>
>> 9) I can't find any action on the military base in Central IL, so I hav to
>> ask the peple on th USNET.
>nope
>
>on in 9 oh fake

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

1258. Re: Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 18:20:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ahstd3do6kfvo05vos3mpve5tjrcop9slr@4ax.com>
Source record: 36576

On Wed, 05 Sep 2007 08:04:32 -0700, Andiroo <a.richman@btinternet.com>
wrote:

>1) its just the way the antenna works and the ATU cant do any better?

Probably.

>2) the ATU is not working properly (but it seems to get a decent match
>elsewhere)?

Too complex an answer for a non-problem, no.

>3) there is a problem with the plugs (would this appear to make a
>difference only on some frequencies)?

Not as you describe things.

>4) somehow the stell balcony / balustrade is causing a problem even
>though i am keeping the ladder line approx 12 inches away from it.
>Also would this only cause a problem on 20M?

Nope, 12 inches is fine.

>5) running the coax along the steel balustratde and into the house is
>causing a problem (is this possible)?

Only if the "problem" changes with moving the coax.

>Confounding factor is that it seems to be working ok even with the
>high SWR and i have made some decent contacts on both 40 and 20
>metres.

Well! that certainly sucks big time.

>I thought i should start with the plugs but any other thoughts welcome
>- all very odd!!

Actually, given you can receive and transmit, the plugs was probably
the worst guess. All in all this is a case of losing your keys in the
road at night, and spending all your time searching under the street
light.

Are you, perhaps, under the impression that a G5RV (or any variation
thereof) "should perform better?"

73's
Richard Clark, KB7QHC

1259. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 18:38:53 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fbmtbdqhs1@news.service.uci.edu>
Source record: 36577

Denny wrote:
>>>On the other hand, the absence of porous plates in operating
>>>radiometers tends to cast some doubt on your claim that the plates
>>>must be porous.
>>
>>Not "my claim," my report. The claim they must be porous arrives
>>through the math necessary to balance the kinetic forces. >
>>
>>>Again, which radiometer? If you are arguing a "perfect" vacuum, then
>>>
>>>>like a free lunch, I would agree there's no such thing. The Crookes
>>>>radiometer requires a partial atmosphere to work, other radiometers
>>>>work quite fine with much less.
>>
>>>Depends entirely on what one intends to measure.
>>
>
> Despite the photon torpedoes fired at me, I have not seen a convincing
> physics experiment that deflates my previous arguement...
>
> Where the F=MA arguement fails in a radiometer is that the photons
> impact both sides of the paddles leaving a zero net force for
> rotation...
>
> The fact that a Crookes Radiometer requires an atmosphere is proof of
> its mode of operation. The fact that it has to be a partial vacuum
> further proves how it operates (more air density means too much air
> drag to allow rotation by the weak local differential pressure across
> the paddle)...
>
> Those who reject local differential pressure changes due to local
> heating by claiming the pressure in the bulb is static ignore the
> factor of time in molecular exchange of thermal energy gains...
> Carrying their argument to the logical end means sun heating cannot
> cause the winds to ever blow across the ground because the net air
> pressure of Terra is static...
>
> denny
> It's 10PM somewhere, have you hugged your radio today?

Hi Denny -

The thing that seems to have certain people confused here is the fact
that, with regard to radiometers, there are two different effects at
work. Radiation pressure is in fact quite measurable, but is an

orders of magnitude smaller force than the thermal/molecular effect that toy store radiometers demonstrate.

Radiation pressure is such a small effect that it cannot be observed unless the vessel is first evacuated to an ultra high vacuum. Ordinarily, one would use a torsion or micro balance to measure this effect. But in a radiometer type arrangement, the vanes rotate in a direction away from the more reflective side because the change in momentum is twice as high for a reflected photon as it is for an absorbed photon.

But in the case of the thermal, partially evacuated (toy store) radiometer, the black side of the vanes absorbs more thermal energy and is therefore hotter than the white side which absorbs less and reflects more energy. Gas molecules which encounter the vanes in a partially evacuated radiometer are ejected more energetically from the hotter side than from the cooler side thus creating a net force in the direction away from the black (less reflective) side. This is as you described.

73, ac6xg

1260. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 18:56:54 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r2ttd354t67f7fvs1h6hmrfameents3a4p@4ax.com>
Source record: 36578

On Wed, 05 Sep 2007 04:33:11 -0700, Denny <k8do@mailblocks.com> wrote:

>Despite the photon torpedoes fired at me, I have not seen a convincing
>physics experiment that deflates my previous arguement...

Hi Denny,

You need a better reading list. Researching the historical names
offered would be a start.

>Where the F=MA arguement fails in a radiometer is that the photons
>impact both sides of the paddles leaving a zero net force for
>rotation...

Well, the Newtonian math certainly fails (as does the Quantum math);
but not because photons hit (more properly absorbed by) both vanes
equally for a net zero force (an appeal to F=MA already dismissed). If
you observe the Crookes radiometer (and its brethren), it has distinct
differences in reflection/absorption characteristics which impart a
very considerable differential in the net force; which, again, do not
balance with the energy applied. This is not to dismiss the obvious
reaction, however; but no one here has offered any quantifiable forces
other than myself.

>The fact that a Crookes Radiometer requires an atmosphere is proof of
>its mode of operation. The fact that it has to be a partial vacuum
>further proves how it operates (more air density means too much air
>drag to allow rotation by the weak local differential pressure across
>the paddle)...

Unfortunately (and as mentioned several many times), the so-called
differential in pressure does not balance with the applied energy.
Even if it did, it would require a porous vane to make it work
(another negative hit). It would be useful if someone could offer
even one line of quantifiable data to support ANYTHING. So much of
this is testimonial that this should be called rec.radio.tent.meeting
given the general inclination to veer from facts towards faith.

>Those who reject local differential pressure changes due to local
>heating by claiming the pressure in the bulb is static ignore the
>factor of time in molecular exchange of thermal energy gains...
>Carrying their argument to the logical end means sun heating cannot
>cause the winds to ever blow across the ground because the net air
>pressure of Terra is static...

Hmmm, who could those heathens be? Perhaps the scurvy Nichols and
Tear whose radiometer works so well in a more complete Vacuum?

73's
Richard Clark, KB7QHC

1261. Re: inquiry from a newb

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 19:28:18 UTC
From: Harry7 <cpa599@gmail.com>
Message-ID: <1189020498.500550.226300@r29g2000hsg.googlegroups.com>
Source record: 36579

I might ask how much room do you have - indoors,attic, outdoors,
rooftop, etc.? Don't assume you need an acre for a decent antenna.

Let us know how much area you have to work with & we can make
suggestions.

Terry
W8EJO

> I've been a SWLer for years and am considering getting a ham license.
> However, I live in an urban area (Brooklyn) and wonder just how
> effectively I can transmit from here. Big outdoor antennas and ground
> radials are out of the question.
>
> Obviously I'd be starting out on VHF and UHF frequencies, perhaps with
> only a modest handheld transceiver. Handhelds look pretty puny, but is
> this appearance deceptive? Would one allow me to talk to lots of
> people and learn from them?
>
> Any insights you can share will be greatly appreciated.
>
> Steve

1262. Re: inquiry from a newb

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 20:07:48 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <p0EDi.30947$L_7.17381@newsfe16.phx>
Source record: 36580

>
>> I've been a SWLer for years and am considering getting a ham license.
>> However, I live in an urban area (Brooklyn) and wonder just how
>> effectively I can transmit from here. Big outdoor antennas and ground
>> radials are out of the question.
>>
>> Obviously I'd be starting out on VHF and UHF frequencies, perhaps with
>> only a modest handheld transceiver. Handhelds look pretty puny, but is
>> this appearance deceptive? Would one allow me to talk to lots of
>> people and learn from them?
>>
>> Any insights you can share will be greatly appreciated.
>>
>> Steve
>
>

You can go HF mobile - a friend has worked over 150 countries while mobile.

mobile antennas at url

http://ac6v.com/antdealer.htm#MOBILE

STEALTH ANTENNAS AT URL:
http://ac6v.com/antdealer.htm#STEALTH

LAMONT

1263. Re: inquiry from a newb

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 20:16:06 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <c8EDi.30948$L_7.26569@newsfe16.phx>
Source record: 36581

>> I've been a SWLer for years and am considering getting a ham license.
>> However, I live in an urban area (Brooklyn) and wonder just how
>> effectively I can transmit from here. Big outdoor antennas and ground
>> radials are out of the question.
>>
>> Obviously I'd be starting out on VHF and UHF frequencies, perhaps with
>> only a modest handheld transceiver. Handhelds look pretty puny, but is
>> this appearance deceptive? Would one allow me to talk to lots of
>> people and learn from them?
>>
>> Any insights you can share will be greatly appreciated.
>>
>> Steve
>
>
IN ADDITION TO MOBILE AND STEALTH -- AS A LICENSED AMATEUR - YOU CAN TALK TO HAMS ALL OVER THE WORLD USING ECHOLINK -- USING YOUR COMPUTER AND THE INTERNET

http://www.echolink.org/el/

Or IRLP (Internet Radio Linking Project) with a hand held
http://www.eham.net/newham/irlp

Lamont

1264. Re: Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 20:49:35 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99A3456AEF836nonenowhere@61.9.191.5>
Source record: 36582

Andiroo <a.richman@btinternet.com> wrote in news:1189004672.355388.8520
@k79g2000hse.googlegroups.com:

...
> All
>
> More on the nature of the problem. I have basically fitted a 1/2 size
> G5RV. Its fitted at 30 ft high between a pole at the end of the yard
> and the chimney at approx 30 ft high. The ladder line falls pretty
> much vertically except for the very end where i have had to divert it
> away from a steel cast iron style balcony which surrounds a roof
> terrace on the first floor. I figured it would not be good to brush
> alongside the balcony as its metal.
>
> Anyway, i am getting some very weird SWR readings even when i am using
> my automatic ATU (LDG Z-100. These range from close to 1.1:1 on
> 40metres all the way up to 3.1: 1 in the middle of the 20 metre band.
> I am trying to work out where the problem may lie. So far i have come
> up wiith:
...

You might find my article on optimising the G5RV of interest. You will need to scale for a half size G5RV, so scale the frequency axis of the graph times two, and when it tells you to check for an electrical half wave of open wire line at 14Mhz, you need to do it at 28Mhz etc. The article is at http://www.vk1od.net/G5RV/optimising.htm .

After some basic DC tests for proper and reliable connection, no short circuits etc, next is some more serious RF evaluation of the antenna system.

The commonest reason for a G5RV to perform worse than expected is that the open wire line is an incorrect length, usually due to not properly considering its velocity factor. (If you purchased a kit, as so many people seem to do nowadays, you would hope that the supplier got this correct... but?) Next is the length of the dipole which is often regarded as not affected by its environment. (This applies to a commercial kit as well as a DIY G5RV.) A tape measure is the start of setting up a G5RV, not the end.

Owen

1265. Re: inquiry from a newb

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 21:44:21 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <OLadnbQNF9Jrv0LbnZ2dneKdnZydnZ2d@pipex.net>
Source record: 36583

> IN ADDITION TO MOBILE AND STEALTH -- AS A LICENSED AMATEUR - YOU CAN
> TALK TO HAMS ALL OVER THE WORLD USING ECHOLINK -- USING YOUR COMPUTER
> AND THE INTERNET
>
> http://www.echolink.org/el/
>
>
> Or IRLP (Internet Radio Linking Project) with a hand held
> http://www.eham.net/newham/irlp
==========
True ,but that has nothing to do with amateur RADIO.
This NG is mostly about amateur RADIO antennas.

In spite of all the conveniences of Internet linking ,let's focus on the
RADIO aspects of the hobby ,even at/from locations where the
installation of 'run-of-the-mill' antennas is a problem or outright
impossible

Frank GM0CSZ / KN6WH

1266. Re: Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-05 22:01:46 UTC
From: Andiroo <a.richman@btinternet.com>
Message-ID: <1189029706.969996.28930@o80g2000hse.googlegroups.com>
Source record: 36484

On Sep 5, 9:49 pm, Owen Duffy <n...@no.where> wrote:
> Andiroo <a.rich...@btinternet.com> wrote in news:1189004672.355388.8520
> @k79g2000hse.googlegroups.com:
>
> ...> All
>
> > More on the nature of the problem. I have basically fitted a 1/2 size
> > G5RV. Its fitted at 30 ft high between a pole at the end of the yard
> > and the chimney at approx 30 ft high. The ladder line falls pretty
> > much vertically except for the very end where i have had to divert it
> > away from a steel cast iron style balcony which surrounds a roof
> > terrace on the first floor. I figured it would not be good to brush
> > alongside the balcony as its metal.
>
> > Anyway, i am getting some very weird SWR readings even when i am using
> > my automatic ATU (LDG Z-100. These range from close to 1.1:1 on
> > 40metres all the way up to 3.1: 1 in the middle of the 20 metre band.
> > I am trying to work out where the problem may lie. So far i have come
> > up wiith:
>
> ...
>
> You might find my article on optimising the G5RV of interest. You will
> need to scale for a half size G5RV, so scale the frequency axis of the
> graph times two, and when it tells you to check for an electrical half
> wave of open wire line at 14Mhz, you need to do it at 28Mhz etc. The
> article is athttp://www.vk1od.net/G5RV/optimising.htm.
>
> After some basic DC tests for proper and reliable connection, no short
> circuits etc, next is some more serious RF evaluation of the antenna
> system.
>
> The commonest reason for a G5RV to perform worse than expected is that
> the open wire line is an incorrect length, usually due to not properly
> considering its velocity factor. (If you purchased a kit, as so many
> people seem to do nowadays, you would hope that the supplier got this
> correct... but?) Next is the length of the dipole which is often
> regarded as not affected by its environment. (This applies to a
> commercial kit as well as a DIY G5RV.) A tape measure is the start of
> setting up a G5RV, not the end.
>
> Owen

Owen

Yes it was a commercial antenna and i guess the last thing on my mind was measuring its length? mmmm.... now you got me thinking, Given this was far from the cheapest G5RV and from W&S rather than some unknown on ebay i would have hoped it was 51ft as described. Would i need to source a willing local fellow to come around with an antenna analyser or are there some simple tests. I will read the article and give this some more thought. Thanks for the ideas.

Andy
M3ZLN

1267. Results: Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 00:01:14 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.09.06.00.01.13.847251@from.qrz.com>
Source record: 36485

I thought I'd post the results of my recent little project to put up a Carolina Windom for 80/40/20.

Didn't work very well. :-(

At least, not yet. ;-)

I cut it for 3.6 MHz, and according to everything I read that should give decent performance on or about 7.2, 14.4, and 28.8 MHz.

Instead, I got 3.6 MHz (as expected), then I got about 6.6 and about 14.9.

I followed the instructions I found in one website article that said to cut the legs for 37.8 percent and 62.2 percent.

Other articles I've read say to cut for 1/3 and 2/3 of a half wavelength, i.e. feed the antenna 1/3 of the way from one end.

Since I'm a high precision sort of a dude ;-), I figured 37.8 and 62.2 were more precise than 1/3 and 2/3, so I tried them.

Like I said ... works well on 3.6 (and most of the rest of the 80 meter band) but not anywhere else.

It is built with a W2AU balun (4:1), 22 feet of RG-8X, an MFJ "line isolator" (1:1 current-type unun), then about 25 feet of RG-8X to the shack.

I guess I'll have to go back up there next nice day and try the 1/3 2/3 way.

1268. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 00:02:38 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fbngem$8ft$1@news.service.uci.edu>
Source record: 36486

Richard Clark wrote:
> On Wed, 05 Sep 2007 00:04:23 -0000, Jim Kelley <jwkelley@uci.edu>
> wrote:
>
>
>>Richard Clark wrote:
>>
>>
>>>The description you offer requires a porous plate which is absent in
>>>every radiometer that has come down the pike
>>
>>On the other hand, the absence of porous plates in operating
>>radiometers tends to cast some doubt on your claim that the plates
>>must be porous.
>
>
> Not "my claim," my report.

So be it. The absence of porous plates in operating radiometers tends
to cast doubt on your report that the plates must be porous.

> The claim they must be porous arrives
> through the math necessary to balance the kinetic forces.

But a balance of forces would result in the absence of an observable
effect. An imbalance in forces is required in order to produce
movement.

> Now, if we simply move to another radiometer (Nichols, Tear, Hull, and
> Webb already recited) without that partial vacuum, the vanes still
> move, and expressely by Radiation Pressure.

By a different mechanism and in the opposite direction, yes.

> In essence, these instruments indicate,
> not measure.

A description which applies beautifully to power meters as well, don't
you agree? ;-)

> The coy context of the thread was measuring the mass of a Photon.
> Absolutely no SI Units have been named or any quantitative values
> offered (the rather standard omission from claims made here).
> However, feel free to introduce your own side thread's goal or even offer a
> guess (your own quatitative value for the mass).

I'd like to offer m = E/c^2 as a guess.

73, ac6xg

1269. Re: Results: Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 00:34:40 UTC
From: Bob Schreibmaier <k3ph@ptd.net>
Message-ID: <20070906-003440.656.0@Bob-Schreibmaier.news.ptd.net>
Source record: 36487

In article <pan.2007.09.06.00.01.13.847251@from.qrz.com>,
get.my.email@from.qrz.com says...
>
>
>
>I thought I'd post the results of my recent little project to put up a
>Carolina Windom for 80/40/20.
>
>Didn't work very well. :-(
>
>At least, not yet. ;-)
>
>I cut it for 3.6 MHz, and according to everything I read that should give
>decent performance on or about 7.2, 14.4, and 28.8 MHz.
>
>Instead, I got 3.6 MHz (as expected), then I got about 6.6 and about 14.9.
>
>I followed the instructions I found in one website article that said to
>cut the legs for 37.8 percent and 62.2 percent.
>
>Other articles I've read say to cut for 1/3 and 2/3 of a half wavelength,
>i.e. feed the antenna 1/3 of the way from one end.
>
>Since I'm a high precision sort of a dude ;-), I figured 37.8 and 62.2
>were more precise than 1/3 and 2/3, so I tried them.
>
>Like I said ... works well on 3.6 (and most of the rest of the 80 meter
>band) but not anywhere else.
>
>It is built with a W2AU balun (4:1), 22 feet of RG-8X, an MFJ "line
>isolator" (1:1 current-type unun), then about 25 feet of RG-8X to the
>shack.
>
>I guess I'll have to go back up there next nice day and try the 1/3 2/3
>way.

The 14.9 MHz sounds about right, but the 6.6 MHz sounds
very weird. I would have believed 7.6. In general, the
40-meter resonance point will not be exactly twice what
it was on 80 meters, nor will the 20-meter resonance point
be exactly four times what it was on 80 meters. Generally,
it will be higher in frequency.

I have had good success in the past using the 1/3 and 2/3
leg lengths with a Spiro 4:1 balun and a bead balun right

at the feed point. However, if you really want this to work on 40 and 20 meters, you will want to make your antenna longer than you have.

I used legs of 45 and 90 feet. The SWR was about 1.0 at 3.5 MHz and 1.3 at 3.6 MHz. Actually, it didn't reach 2.0 until about 3.75 MHz. Lowest SWR on 40 meters was at 7.2 MHz at about 1.0 and was low across the band. The lowest SWR on 20 meters was at 14.35 MHz at about 1.0, but was 1.8 at the bottom of the band. By the way, it didn't look nearly so good on 10 meters, where the lowest SWR was 1.8 and quickly rose to over 2 at 200 kHz either side of 28.6 MHz.

Good luck with whatever you try.

73,
Bob
K3PH

1270. Re: Results: Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 00:51:31 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <78IDi.49002$t9.19895@bignews7.bellsouth.net>
Source record: 36488

I think I see the problem, you were using metric % instead of American %.
(wink)

Ed, NM2K

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in message
news:pan.2007.09.06.00.01.13.847251@from.qrz.com...
>
> I thought I'd post the results of my recent little project to put up a
> Carolina Windom for 80/40/20.
>
> Didn't work very well. :-(
>
> At least, not yet. ;-)
>
> I cut it for 3.6 MHz, and according to everything I read that should give
> decent performance on or about 7.2, 14.4, and 28.8 MHz.
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> I followed the instructions I found in one website article that said to
> cut the legs for 37.8 percent and 62.2 percent.
>
> Other articles I've read say to cut for 1/3 and 2/3 of a half wavelength,
> i.e. feed the antenna 1/3 of the way from one end.
>
> Since I'm a high precision sort of a dude ;-), I figured 37.8 and 62.2
> were more precise than 1/3 and 2/3, so I tried them.
>
> Like I said ... works well on 3.6 (and most of the rest of the 80 meter
> band) but not anywhere else.
>
> It is built with a W2AU balun (4:1), 22 feet of RG-8X, an MFJ "line
> isolator" (1:1 current-type unun), then about 25 feet of RG-8X to the
> shack.
>
> I guess I'll have to go back up there next nice day and try the 1/3 2/3
> way.
>

1271. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 00:54:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <u8jud397p91ubip9mduk70cdjbfh26jn3b@4ax.com>
Source record: 36489

On Wed, 05 Sep 2007 17:02:38 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>> Not "my claim," my report.
>
>So be it. The absence of porous plates in operating radiometers tends
>to cast doubt on your report that the plates must be porous.

Hi Jim,

You should distinguish between reporting, claims, and what you see.
The point about being porous is to substantiate the expectation of
explaining the full energy budget (and specifically for the Crookes
radiometer). I don't know how many times I have to emphasize this,
but NO METHOD achieves that balance.

>> The claim they must be porous arrives
>> through the math necessary to balance the kinetic forces.
>
>But a balance of forces would result in the absence of an observable
>effect. An imbalance in forces is required in order to produce
>movement.

The balance is in the energy applied and the energy expended. You put
an HP into a car, and it will accelerate 550 foot-pounds/sec. You put
x photons into ANY radiometer, and the change in inertia WILL NOT
balance.

[This is why I expressed my question in Newtonian terms for the
benefit of the twins who are so devoted to the master (that they are
wholly lost in a simple 2 variable computation). The difference
between that computation and performance is extreme. What is more
compelling, is that it is quite a departure from what Quantum
Mechanics would predict. NO METHOD achieves that balance.]

>> Now, if we simply move to another radiometer (Nichols, Tear, Hull, and
>> Webb already recited) without that partial vacuum, the vanes still
>> move, and expressely by Radiation Pressure.
>
>By a different mechanism and in the opposite direction, yes.
>
>> In essence, these instruments indicate,
>> not measure.
>
>A description which applies beautifully to power meters as well, don't
>you agree? ;-)

No. Power meters to even uncommonly high accuracy still conform to
Newtonian mechanics.

>> The coy context of the thread was measuring the mass of a Photon.
>> Absolutely no SI Units have been named or any quantitative values
>> offered (the rather standard omission from claims made here).
>> However, feel free to introduce your own side thread's goal or even offer a
>> guess (your own quatitative value for the mass).
>
>I'd like to offer m = E/c^2 as a guess.

The photo-electron appears to even depart from that. More to follow.

73's
Richard Clark, KB7QHC

1272. Re: Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 02:01:50 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <OeKdnZM1P5sVwkLbnZ2dnUVZ_gadnZ2d@giganews.com>
Source record: 36490

Tam/WB2TT wrote:
>
> Andiroo wrote:
> > All
> >
> > Is it possible to check the quality of a coax connection to a PL259
> > plug without taking the plug apart - i.e. simply by using a
> > multimeter?
> >
> > Many thanks
> >
> > Andy
> >
> In a newly installed connector, the most common fault, by far, is a short
> from the center conductor to shield. Also, make sure that the opening in
the
> center pin is completely filled with solder. For small coax, I usually
stuff
> short pieces of heavier wire in there before soldering. You need a fairly
> large iron to solder the shield. I found a ~200 W soldering gun works OK.
>
> Tam/WB2TT

There are many ways to install the 83-1SP/PL-259 plugs. The instructions given on the Amphenol website (http://www.amphenolrf.com/products/assemblyInstructions/274.pdf) will show the basics. In addition to what Tam says (use LOTS of soldering iron/gun heat, and get in/out fast), I found a way to solder the plugs that have nickel plating on the connector body.

Nickel doesn't like to solder worth a darn, and it will take lots of heat to burn through it. By the time you do, the cable dielectric (and possibly the insulator on the cheaper plugs) will turn to mush. It's worse with foamed polyethylene vs solid polyethylene coaxial cable. Before assembling the plug onto the cable, remove the plating on the inside circumference of the plug. A small round file, X-acto knife, or 1/8" drill bit will do the trick. My soldering "weapon of choice" is a Weller #8200 100/140W unit.

If using RG-58, you have the option of using an Amphenol "field crimp plug", PN 83-58-FCP which requires no soldering, no special installation (crimping) tools, and works VERY well. Larsen supplies them in their permanent mounting kits. I intalled lots of them at a previous gig. One day, I did a test of how well they hang onto the cable. I installed one on a scrap piece of cable, hooked the connector into a vise, and pulled on the cable until something gave. The cable broke. They're $2.92 each (in QTY = 10 to 24)

from Digi-Key.

Bryan WA7PRC

1273. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 02:55:19 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <w_JDi.1352$7P7.741@newssvr19.news.prodigy.net>
Source record: 36491

John Smith wrote:
> Why has ether become synonymous with "kook?"

From Wikipedia:
"Einstein in later years proposed calling empty space equipped
with gravitational and electromagnetic fields the "ether",
whereby, however, this word is not to denote a substance with
its traditional attributes. Thus, in the "ether" there are to
be no determinable points, and it is meaningless to speak of
motion relative to the "ether." Such a use of the word "ether"
is of course admissible, and when once it has been sanctioned
by usage in this way, probably quite convenient."

Ives was the first to positively measure the effect of speed on clock
rates. He wrote in 1940 in a paper in Science:

"I have considered the popular claim that the ether has been "abolished"
[...]. Reverting to experimental findings I have reviewed the experiment
of Sagnac, having in mind the claim that the ether can not be detected
experimentally. I have asserted that, in the light of the experimentally
found variation of clock rate with motion, this experiment does detect
the ether."
--
73, Cecil http://www.w5dxp.com

1274. Re: 160m Stealth - (was- LQQKing for 160m)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 02:57:00 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <40KDi.1353$7P7.537@newssvr19.news.prodigy.net>
Source record: 36492

John Doe wrote:
> 1 more question - Instead of using either the fixed 160m stick w/whip
> (stinger), or the 30 - 40 ft of wire, what do you think about using a
> Screwdriver Antenna at the top of the tree and running either a counterpoise
> or radials??

The screwdriver coil can certainly be used in the middle
of the 40 foot vertical wire to tune the system to resonance.
Bury some radials and you are in business.
--
73, Cecil http://www.w5dxp.com

1275. Re: Results: Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 03:16:41 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.09.06.03.16.40.7275@from.qrz.com>
Source record: 36493

Thanks, Bob, I will try your measurements.

I don't really care much about 10 meters and if I ever do get interested in it I'll probably just toss up a ground plane.

The SWR figures you mentioned sound fine to me, the autotuner in the TS-940S can handle the SWRs I'm getting now so it'll be able to handle those while never breaking a sweat.

I don't understand the 6.6 MHz either, very strange.

1276. Re: Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 06:48:08 UTC
From: "Roger (K8RI)" <validaddress@my.com>
Message-ID: <ci8vd3p8ooi8u3crm1uib07m1tt4b9djaq@4ax.com>
Source record: 36494

On Tue, 04 Sep 2007 23:29:36 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>On Tue, 04 Sep 2007 22:39:21 -0700, Andiroo <a.richman@btinternet.com>
>wrote:
>
>>All
>>
>>Is it possible to check the quality of a coax connection to a PL259
>>plug without taking the plug apart - i.e. simply by using a
>>multimeter?

Hi-potting would be better as it *may* find whiskers which the
multimeter will not, but the multimeter will find the majority of
problems.

73

Roger (K8RI)
>
>Hi Andy,
>
>With both ends in your lap:
>shells, end to end - very low Ohms;
>pins, end to end - very low Ohms;
>shell to pin, either end - infinite Ohms.
>
>73's
>Richard Clark, KB7QHC

1277. Re: Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 06:53:03 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <1ww0QWEPP63GFAuQ@ifwtech.co.uk>
Source record: 36495

Bryan wrote:
>There are many ways to install the 83-1SP/PL-259 plugs. The
>instructions given on the Amphenol website
>(http://www.amphenolrf.com/products/assemblyInstructions/274.pdf) will
>show the basics. In addition to what Tam says (use LOTS of soldering
>iron/gun heat, and get in/out fast), I found a way to solder the plugs
>that have nickel plating on the connector body.
>
>Nickel doesn't like to solder worth a darn, and it will take lots of
>heat to burn through it. By the time you do, the cable dielectric (and
>possibly the insulator on the cheaper plugs) will turn to mush. It's
>worse with foamed polyethylene vs solid polyethylene coaxial cable.
>Before assembling the plug onto the cable, remove the plating on the
>inside circumference of the plug. A small round file, X-acto knife, or
>1/8" drill bit will do the trick.

An even better way is to file *across* the holes, cutting the brass body
down to two thin feather edges which are easier to solder.

> My soldering "weapon of choice" is a Weller #8200 100/140W unit.
>
For anyone who doesn't already have a large iron, I'd recommend buying
an inexpensive hot air gun instead.

If you use the hot air gun to pre-heat the connector body, your existing
25W iron can handle the soldering part.

Another use for the hot air gun is with heat-shrink tubing, so it's $20
well spent. The only risk is that someone may ask you to strip paint
with it.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1278. Hy-Gain AV640 (Patriot) problem, or Bugs in the Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 07:46:50 UTC
From: "Roger (K8RI)" <validaddress@my.com>
Message-ID: <n09vd31a287h7tl3rvpouh5pmu6lhp6ovn@4ax.com>
Source record: 36496

I put up a Hy-Gain AV640 a few years back for a backup and as the HF antenna for my shop. The antenna was on top of a 32 foot aluminum tower at the West end of the shop. The match on all the bands was near perfect, or at least it was slightly better than I'd expected with 1.1:1 at resonance. Bandwidth on each band was more than adequate and much wider than any trap, multi band vertical id used in the he past.

I had mainly been listening to W1AW code practice on 40 but did make a few contacts on 40 and 6-meters.

I recently replaced the old Henry 2K4 with a Tokyo Hy-Power HL-1.5KFX solid state amp which happens to cover 6-meters as well. With the little Yaesu FT-897D it also gives auto band switching and will remember which of two antennas connected to the amp you were using for each band.

At-any-rate a couple weeks back 6-meters opened up and a spent a few hours making contacts from the East, West, and Gulf coasts. (no DX <sigh>) When I went to operate on 40 the amp was kicking out due to high SWR and started doing the same on six. Both 40 and 15 were resonant about 1 MHz below the bottom end of the bands. Minimum SWR at resonance had gone from 1.1:1 to between 1.6 and 2:1.

We (several other hams and myself) let the Tower/antenna down. It had one broken insulator which would not have caused the problem, but I built a new one out of Lexan which is a lot more sturdy than the old *stuff*. THEN I got to the matching network. That thing was packed solid with Wasp nests and crispy crittered Wasps along with a pile of dead Wasps and Wasp *goo* on the coax chassis connector in the bottom of the box. That goo made it through the chassis connector and badly corroded about 3' of 9913 which is being replaced with LMR-600. NOTE the original drain holes are just a tad too large and just right for Wasp entry for their new home. So if you use one of these antennas, plugging the drain holes and drilling a series of smaller ones might be in order. OTOH Hy-Gain does state you should take the antenna down and clean out the matching network every year or so. (Wasps can build a *big* nest in a few days)

Apparently there is some truth to the RF exposure hazard, or there was for the wasps in close proximity to high power on 6-meters. None of them complained when I cleaned the nests out. BTW I had to completely remove the tuning unit from the box to be able to get the nests and *glue* they make off the torroids.

Having the antenna down, I took the opportunity to give it an overhaul. I cleaned all the connections which looked pretty bad (lots of white powder), used a tiny bit of nolox (similar to Pentrox) on each coil and jumper connection after cleaning, which was then sealed with liquid electrical tape. The jumper from the tuning unit to the counterpoise had to be replaced. After 5 years the fiberglass is showing some deterioration due to UV exposure. Be careful about coating these coils while trying to protect the fiberglass. The coils are right under the top hats and clear Krylon or liquid electrical tape may add a bit of capacitance in parallel to the coils and with them being right under the capacitive hats a little capacity can go a long way resulting in the resonant frequency going down substantially for that specific band.

I put the antenna back up on a 14foot pole anchored to the NW guy anchor for my big tower. On checking, the SWR for 40, 20, and 6-meters is just where it's supposed to be as is the resonant frequency and the SWR at resonance is showing 1.0:1. However two bands, 15 and 10 are showing 1.6:1 and 1.9:1 at resonance. (resonance is back where it belongs) All solder joints in the matching network have been resoldered and checked. Wires and cores were also checked for insulation and burn marks. Tech support told me not to worry about running 750 watts output PEP even though the ratings show 300 watts for 6-meters as long as there were no signs of overheating or arcing. The network should handle that with ease.

So the problem, or question is, why the change in minimum SWR on 15 and 10 meters? What may I have missed? The analyzer is no help for this.

I gotta get that antenna system on the big tower repaired and the rotator reinstalled for the DX season. Then maybe I can set up an interconnect so I can use those antennas from the shop as well while keeping the AV640 as a backup. I rebuilt the PST-61 (seals failed and water took out the main bearings) and it's ready to go back in. Unfortunately nature gave me a bit of a set back last April and I had to learn to walk again. However I'm about ready to tackle the tower work real soon. I've been working at 30 to 40 feet, but that doesn't take near the energy of climbing to 100', working for a couple hours, and still have the energy/strength to climb back down.

BTW I had been working on top of the guy anchor post Thursday afternoon for about a half an hour when I noticed a couple of bees flying around. They weren't bothering me, but when I looked down into that 5" pipe I saw a very large Wasp nest with Wasps crawling all over it. At that point I hosed it down with Wasp and Hornet killer. I decided I had pushed my luck far enough.

Roger (K8RI)

1279. Why Many Hate Porn?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 10:23:12 UTC
From: defendingtruthwithscience@yahoo.com
Message-ID: <1189074192.752193.192350@w3g2000hsg.googlegroups.com>
Source record: 36497

Human natures are fine tuned for gene pool survival.

The way we evolve in the gene pool is that when we're not at war, we're in a race.

Peace and freedom means competition. Some people are uncompetitive. So they don't want to compete. Those people demand slavery.More...

Those who demand slavery are not necessarily poorer or richer, superior or inferior. Those are people that somehow do not like competition.

The farm owning farmers in southern US, for example, do not want to compete with the higher salary the industrial north has, so they demand slavery. This happens despite the fact that the landlords are already way richer than their slaves.

Uncompetitive businesses also do not want customers to be free to choose the best products. They demand enslavements of consumers by restricting consumers choice to choose better products.

As time goes by and consensual productive means to aquire wealth become available, those who oppose competition tends to be the one inferior.

When we're not at war, we're in a race. So in a sense, some part of life is a zero-sum game. The happiness of some superior competitors correlate with gene pool survival of such people. This correlate with the extinction of inferior people and this make inferior people unhappy....page...

For example, women prefer rich smart males and normal males prefer as many females as possible. Actually poor males prefer more money rather than more women, but that's later.

If rich smart males get more females, then rich smart alpha males will survive better in the gene pool. That means, the other males do not get any. Hence, the lesser males will not be happy. They will then come up with monogamy to ration females in equal share for everyone.

Those who are uncompetitive are not going to say honestly that they are disgruntled competitors. They're going to come up with some religious unscientific fairy tales to come up with pretext that freedom, such as free sex is wrong.

In short, whenever someone is happy, whenever something gives pleasure, happiness, and money, you can count that someone, somewhere, somehow, will come up with some fairy tales of who knows what that

somehow it's wrong, bad, and should be prohibited.

The preference to snuff of happiness earned by others are called envy. In a sense, those who want to be happy are meant to kill each other with those who are envious.

Unless those who run the fastest also hit the hardest, success is simply a bridge to a gas chamber. Deviation from free fair competition turns life into some form of gun fight.

Not everyone can be appeased in a gun fight. Envy is simply unappeasable. The way to keep pursuing our happiness and still be alive is either to kill, or threaten to kill, those who are envious of us that it's not to their best interests to kill or prosecute us....page...

That's why I strongly support death penalty. Without it, all succesful people will be slaughtered by bigots that don't mind going to jail for it.

It's also the same reason why many ugly women oppose porn. That's because those women are envy bigots.

Think of it this way. Pretty women can just show some skin and make millions of dollars. Ugly women has to sexually serve poor males and get knocked up for much less money.

If this keeps going, pretty women can pick the best males with the best genes and provide their sons with better education, opportunity, and more initial start up capital.

The pretty genes will survive better in the gene pool and the ugly will be outcompeted, like in Europe or Japan. All thanks to porn.

Obviously, pretty porn stars are way better of then ugly wife. Becoming a porn star or prostitute is then one of the best job ever in this world.

However, out of envy, ugly women will want to prevent that. What's their justification? By saying that all the good jobs are so bad that it can't possibly consensual, and hence has to be prohibited.

They said that porn should be prohibited to protect women. Which women? Not the consenting one of course. How in the earth people get protected from consensual offers anyway. It's there to protect disgruntled envy competitors.

1280. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 11:07:43 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1189076863.522341.272710@r34g2000hsd.googlegroups.com>
Source record: 36498

I have asserted that, in the light of the experimentally
> found variation of clock rate with motion, this experiment does detect
> the ether."
> --
> 73, Cecil http://www.w5dxp.com

Me neither... The old bull dozer refused to start and I hunted all
over the place for a can of ether... Didn't detect one either... Mind
you it was 92 degrees yesterday and rooting around through the
toolshed with the sun beating on the steel roof for ether was no
picnic... I doubt that Michaelson and Morley worked up that much
sweat looking for it...

denny

1281. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 15:06:07 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46e01758$0$18990$4c368faf@roadrunner.com>
Source record: 36499

"John Smith" <assemblywizard@gmail.com> wrote in message
news:fbhnbq$4uu$2@news.albasani.net...
> art wrote:
>
> > ...
>> I'll get it to you
>> Art
>>
>
> I got it--pun intended.
>
> It should be becoming obvious that I have read Einstein--and believed.
>
> Indeed, what other force can we produce upon the ether to achieve our
> communications? EM fields strike/push/pull/influence the ethers' strings
> ...
>
> Those lines of force, seen in iron filings/powder, show "stress" of the
> ether--any engineer worth his salt will recognize these "stress lines" in
> a media ... in this case "gravitational ether"--an un-ponder-able media.
>
> Regards,
> JS

Its just not called ether anymore, Its space-time. Again when the universe was created it created space too, not just propagating matter into space. Beyound the universe there is nothing , within the bounds of the universe there is space time or as Einstien called it then ether. The difference in the concept is that ether was considered something inside of space now it is considered as space. Space can be bent and shaken, no need for ether to explain anything.

A blackhole is able to suck in massless photons because space time has been warped not because of attraction with a massless object.

Jimmie

1282. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 15:11:10 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbp5ajoom1@news.albasani.net>
Source record: 36500

Cecil Moore wrote:

> ...
> "I have considered the popular claim that the ether has been "abolished"
> [...]. Reverting to experimental findings I have reviewed the experiment
> of Sagnac, having in mind the claim that the ether can not be detected
> experimentally. I have asserted that, in the light of the experimentally
> found variation of clock rate with motion, this experiment does detect
> the ether."

Yes, that annoying fact, clocks slow when you place 'em on jet aircraft, refuel the aircraft in flight, and make a few trips around the circumference of the earth.

In my present state of thought, this directly relates to the speed of light; further, I suspect, the ether is responsible in establishing the, seeming, barrier of the speed of light. As you approach the speed of light, things are not linear, you must apply magnitudes more energy without corresponding gains in speed. And, although I tend to believe the math which "proves" this, it ends up just another thing I fail to completely be able to wrap my mind around. But, it seems at the speed of light, traversing the ether with matter offers such a resistance to the speed of matter, any further increases of speed are impossible--no matter the amount of expenditure in energy ...

At this point, I am just happy to be in the company of others who will, at least, accept the possibility of the ether, and the possibility it can/does have real effects/affects on our material world.

Regards,
JS

1283. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 15:14:13 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbp5gjoom2@news.albasani.net>
Source record: 36501

Denny wrote:

> ...
> Me neither... The old bull dozer refused to start and I hunted all
> over the place for a can of ether... Didn't detect one either... Mind
> you it was 92 degrees yesterday and rooting around through the
> toolshed with the sun beating on the steel roof for ether was no
> picnic... I doubt that Michaelson and Morley worked up that much
> sweat looking for it...
>
> denny
>

Denny:

If you should be fortunate enough to find/purchase a can of that
"ether", be careful not to breath the vapors--they may have a
detrimental effect on ones cognitive abilities! :-)

Regards,
JS

1284. Re: Results: Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 15:47:28 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <0580e3truc85ue33gvnkhsjkeh2emi2n2g@4ax.com>
Source record: 36502

If you're experimenting on where to feed the thing, you might look at
the Clothesline Dipole at http://www.arrl.org/tis/info/dipole-h.html

bob
k5qwg

On Wed, 05 Sep 2007 20:01:14 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>
>I thought I'd post the results of my recent little project to put up a
>Carolina Windom for 80/40/20.
>
>Didn't work very well. :-(
>
>At least, not yet. ;-)
>
>I cut it for 3.6 MHz, and according to everything I read that should give
>decent performance on or about 7.2, 14.4, and 28.8 MHz.
>
>Instead, I got 3.6 MHz (as expected), then I got about 6.6 and about 14.9.
>
>I followed the instructions I found in one website article that said to
>cut the legs for 37.8 percent and 62.2 percent.
>
>Other articles I've read say to cut for 1/3 and 2/3 of a half wavelength,
>i.e. feed the antenna 1/3 of the way from one end.
>
>Since I'm a high precision sort of a dude ;-), I figured 37.8 and 62.2
>were more precise than 1/3 and 2/3, so I tried them.
>
>Like I said ... works well on 3.6 (and most of the rest of the 80 meter
>band) but not anywhere else.
>
>It is built with a W2AU balun (4:1), 22 feet of RG-8X, an MFJ "line
>isolator" (1:1 current-type unun), then about 25 feet of RG-8X to the
>shack.
>
>I guess I'll have to go back up there next nice day and try the 1/3 2/3
>way.

1285. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 16:54:43 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fbpc6l$d6i$1@news.service.uci.edu>
Source record: 36503

Richard Clark wrote:

>>>In essence, these instruments indicate,
>>>not measure.
>>
>>A description which applies beautifully to power meters as well, don't
>>you agree? ;-)
>
>
> No. Power meters to even uncommonly high accuracy still conform to
> Newtonian mechanics.

So it is because of Newtonian mechanics that an RF power meter is
actually measuring power rather than indicating power. What is the
value gained by this strain on credulity?

>>>The coy context of the thread was measuring the mass of a Photon.
>>>Absolutely no SI Units have been named or any quantitative values
>>>offered (the rather standard omission from claims made here).
>>>However, feel free to introduce your own side thread's goal or even offer a
>>>guess (your own quatitative value for the mass).
>>
>>I'd like to offer m = E/c^2 as a guess.
>
>
> The photo-electron appears to even depart from that.

I've often wondered how one might go about recognizing a
photo-electron out of a group of other, less prominent electrons? :-)

73, ac6xg

1286. just a reminder steve

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 18:53:33 UTC
From: Mark@TayleorRobesin.org
Message-ID: <05j0e35i7f5m30250o1830qvlkbq59h9d5@4ax.com>
Source record: 36504
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

1287. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 19:12:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <5sf0e35h5jt3253clks6hsi03g98l16gd1@4ax.com>
Source record: 36505

On Thu, 06 Sep 2007 09:54:43 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>So it is because of Newtonian mechanics that an RF power meter is
>actually measuring power rather than indicating power. What is the
>value gained by this strain on credulity?

Hi Jim,

Sounds like you should talk to your Chaplain about these issues.

>I've often wondered how one might go about recognizing a
>photo-electron out of a group of other, less prominent electrons? :-)

It is like complaining the Nobel winners are indistinguishable from
the crowd in the ceremonial hall.

Prominent is key, certainly. How many electrons can you motivate to
leap over the barrier of the work function of a metal? In Physics, a
simple population count would reveal the prominence. Tubes usually
have to boil them off incandescent filaments, or rip them out of their
matrix with 10's of kilovolts of nearby potential.

Hi All,

Let's examine those last two motivators. Photons hardly raise the
temperature of a metal vane to, what, 1000 degrees? And as for
kilovolts of excitation, how much potential is there in a photon?

Well, too often this group starves for information in response when I
toss these questions out - too technical for this forum of light
nappers I suppose. Too often, these threads turn into strings of
slaps at the snooze button (and "ether" has been the biggest snooze of
them all - self-fulfilling if one were to enlarge on the term's
rhetorical baggage).

Place a vane coated with sodium into an evacuated quartz tube.
Illuminate the sodium coated plate such that it absorbs one microwatt
per square meter. This is sufficient power to evoke the
photo-electric response (hopefully this is not too arcane a term). The
bulk of absorption will occur within a layer depth of 10 atoms.
Sodium, one atom thick, measures out to 10^19 atoms per square meter,
so we are absorbing the power throughout 10^20 atoms. Hence each atom
is illuminated with 10^-26 Watts OR 10^-7 eV/sec. (eV: electron Volt,
perhaps another prominence hard to embrace.)

The conundrum (sorry for hard words - but even those who use English
as a second language manage to cope) here is that to build a potential

to at least 1eV (and usually 3 to 5 times that for many metals) would take nearly a year for a single electron to leap the Work Function barrier. In reality, it occurs in less than a nanosecond.

It would be interesting to see Arthur's Newtonian math achieving a 10,000,000,000,000,000:1 leap of faith. False idolatry in place of work is like putting a lottery ticket into the collection plate.

Strip away my stylistic excess and the facts fill maybe three sentences. Still, I am four sentences ahead of the rest. ;-)

73's
Richard Clark, KB7QHC

1288. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 19:22:40 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1189106560.985519.152100@k79g2000hse.googlegroups.com>
Source record: 36506

>
> In my present state of thought, this directly relates to the speed of
> light; further, I suspect, the ether is responsible in establishing the,
> seeming, barrier of the speed of light. As you approach the speed of
> light, things are not linear, you must apply magnitudes more energy
is point, I am just happy to be in the company of others who will,
> at least, accept the possibility of the ether, and the possibility it
> can/does have real effects/affects on our material world.
>
> Regards,
> JS

John
The universe is made of many things. Most all are held within the
confines of a gravitational force.
There are many of these gravitational orbits but one thing is for sure
is all these individual orbits
or gravitational forces are in equilibrium with each other even to the
magnetude of including all
the stars and the galaxies. All mass known is in the final borders of
the total equilibrium outside
of which there is no mass or external forces which has been named the
AETHER. Equilibrium of moving parts
means changes of the shape of the extreme borders within equilibrium
is held .When the equilibrium boundaries change
the shape of the eather also must change and eventually must be
included in an equilibrium of sorts
Art

1289. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 19:45:11 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbplcb$ug4$1@news.albasani.net>
Source record: 36507

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

More:

http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20070906005916&newsLang=en

Regards,
JS

1290. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 19:47:46 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1189108066.544050.326890@50g2000hsm.googlegroups.com>
Source record: 36508

On Sep 5, 5:02 pm, Jim Kelley <jwkel...@uci.edu> wrote:
...
>
> I'd like to offer m = E/c^2 as a guess.
>
> 73, ac6xg

A link is worth a thousand words (perhaps 10k-100k of Richard's...):
http://www.newton.dep.anl.gov/askasci/phy00/phy00332.htm
(in particular the first paragraph of the second response).

1291. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 20:14:21 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbpn38$7oa$1@news.albasani.net>
Source record: 36509

art wrote:

> ...
> AETHER. Equilibrium of moving parts
> means changes of the shape of the extreme borders within equilibrium
> is held .When the equilibrium boundaries change
> the shape of the eather also must change and eventually must be
> included in an equilibrium of sorts
> Art
>

Equilibrium is a poor choice of words when you encompasses the ether, in my humble opinion.

You are attempting to give known states/laws/rules/properties to a material (ether) which Einstein himself tells you NOT to--Einstein implies a proper model for the ether was not available during his lifetime, I do not see where that has changed, to date.

Indeed, in pure form, equilibrium implies a static state--anything more implies an over unity condition (perpetual motion), the forces which drive the motion and birth of stars-planets and the expanding of the universe is/are NOT in a static state, in six billion years a static state has not come into being, in another six billion years it is not expected for it to come into stasis--only if this will remain true "forever" remains a question.

As long as matter exists, the above will, seemingly, remain true. A state of "un-equilibrium" exists in the sheer fact that all matter has been ripped from the very fabric of the ether--this I suspect is a most unnatural state of affairs (no one can be sure, for sure--and we only have one example to view! Other explanations exist ...) ... we will know when we have "seen" the ether and know of the laws/rules which govern it and its' un-ponder-able properties.

Regards,
JS

1292. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 20:39:40 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fbpphf$l2l$1@news.service.uci.edu>
Source record: 36510

Richard Clark wrote:

> Still, I am four sentences ahead of the rest. ;-)

We now learn of the value in strained credulity. :-)

jk

1293. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 21:53:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <s2r0e3p4duiqeb8l7gof4ie2g9rqds1pti@4ax.com>
Source record: 36511

On Thu, 06 Sep 2007 12:47:46 -0700, K7ITM <k7itm@msn.com> wrote:

>On Sep 5, 5:02 pm, Jim Kelley <jwkel...@uci.edu> wrote:
>...
>>
>> I'd like to offer m = E/c^2 as a guess.
>>
>> 73, ac6xg
>
>A link is worth a thousand words (perhaps 10k-100k of Richard's...):
>http://www.newton.dep.anl.gov/askasci/phy00/phy00332.htm
>(in particular the first paragraph of the second response).

Hi Tom,

Your link is over valued (there is no second response), but it
maintains the standard of excellence here in the tradition of 10k-100k
more words than quantifiables - and someone else doing the work.

Care to walk us through your proffered math?

Well, I doubt it. Others may be interested in the curious form of
argument offered to a 15 year old however.

"For a particle with no mass, the relation reduces to E=pc."

The long and short of it is that there is no discussion of mass for a
photon (it is simply defined not to exist) and instead there is a
shuffle of math that youngster must imagine this bozo is pulling the
wool over his eyes through substituting p for Planck's constant h, and
c for Planck's energy formula variable v. This wool pulling is
another favorite past time here too.

Of course, there may be other meanings behind
"E=pc."
but in the model of thorough work, the description of terms is sadly
poor.

The typical legacy of offering links. It has all the appeal of a
Physicist's joke:
"How many milliseconds does it take to do a 5 minute car wash?"

73's
Richard Clark, KB7QHC

1294. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 22:00:32 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1189116032.830476.161920@y42g2000hsy.googlegroups.com>
Source record: 36512

On Sep 6, 2:53 pm, Richard Clark <kb7...@comcast.net> wrote:
...(there is no second response)...

Pity you have so much trouble reading...

1295. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-06 23:07:09 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fbq2ar$q3e$1@news.service.uci.edu>
Source record: 36513

Richard Clark wrote:

> On Thu, 06 Sep 2007 12:47:46 -0700, K7ITM <k7itm@msn.com> wrote:
>
>
>>On Sep 5, 5:02 pm, Jim Kelley <jwkel...@uci.edu> wrote:
>>...
>>
>>>I'd like to offer m = E/c^2 as a guess.
>>>
>>>73, ac6xg

> "E=pc."

Yes, and p=mv, so when v=c as is true for photons, and we substitute mc for p in the equation above and then solve for m (the mass of a photon was the original question), we're back at the equation offered previously.

But we usually relate more directly to the frequency (or wavelength) of the photon rather than its energy or momentum, so in such a case E=h*nu would provide a more direct route to its mass equivalent.

ac6xg

1296. Re: inquiry from a newb

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 00:36:40 UTC
From: Steve <sdaniel13@speakeasy.net>
Message-ID: <1189125400.664740.272590@50g2000hsm.googlegroups.com>
Source record: 36514

On Sep 5, 3:28 pm, Harry7 <cpa...@gmail.com> wrote:
> I might ask how much room do you have - indoors,attic, outdoors,
> rooftop, etc.? Don't assume you need an acre for a decent antenna.
>
> Let us know how much area you have to work with & we can make
> suggestions.
>
> Terry
> W8EJO
>
>
>
> > I've been a SWLer for years and am considering getting a ham license.
> > However, I live in an urban area (Brooklyn) and wonder just how
> > effectively I can transmit from here. Big outdoor antennas and ground
> > radials are out of the question.
>
> > Obviously I'd be starting out on VHF and UHF frequencies, perhaps with
> > only a modest handheld transceiver. Handhelds look pretty puny, but is
> > this appearance deceptive? Would one allow me to talk to lots of
> > people and learn from them?
>
> > Any insights you can share will be greatly appreciated.
>
> > Steve- Hide quoted text -
>
> - Show quoted text -

I live in the top story of an old Victorian house. So, I'm relatively high up, and there's a big, sturdy fire escape at the rear of the house. There's also a modest backyard that I have access to, but with the exception of a small, receive-only loop antenna, I've had bad luck putting antennas back there. Eventually I might be able to arrange an antenna on the roof of the house, so long as it's not too big and noticeable. However, I think any antenna I use though will require a balanced design because my grounding options are severly limited. Maybe a small transmitting loop would be a good choice?

1297. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 01:11:38 UTC
From: jawod <jawod@fuse.net>
Message-ID: <46E0A54A.2080301@fuse.net>
Source record: 36515

John Smith wrote:
> Richard Clark wrote:
>
>> On Mon, 03 Sep 2007 10:35:50 -0400, Ed Cregger
>> <ecregger@bellsouff.net> wrote:
>>
>>> And who was this Schroedinger guy anyway?
>>
>>
>> He was Lucia's boyfriend who played the Pianoforte. Their lives were
>> humorously chronicled in an illustrated fiction called "Goober Peas."
>> Continuing themes of their friends and relatives populated this series
>> with such stories as the "strange attractors" of kites and trees, or
>> the wave function of a football that couldn't be kicked. The
>> illustrator was purported to be one Eisenstein, but this was later
>> found to be erroneously inferred from earlier cinematic work with
>> similar themes found in "Aleksandr Nevskiy."
>>
>> 73's
>> Richard Clark, KB7QHC
>
>
> Interesting.
>
> Did it/he/they have anything to say about visions of silvery and copper
> colored fingers plucking the harp strings of the seemingly invisible ether?
>
> Regards,
> JS

The main character in Woody Allen's "Annie Hall" was based upon ether.

1298. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 01:42:01 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1189129321.688069.38020@w3g2000hsg.googlegroups.com>
Source record: 36516

On 6 Sep, 13:14, John Smith <assemblywiz...@gmail.com> wrote:
> art wrote:
>
> > ...
>
> > AETHER. Equilibrium of moving parts
> > means changes of the shape of the extreme borders within equilibrium
> > is held .When the equilibrium boundaries change
> > the shape of the eather also must change and eventually must be
> > included in an equilibrium of sorts
> > Art
>
> Equilibrium is a poor choice of words when you encompasses the ether, in
> my humble opinion.
>
> You are attempting to give known states/laws/rules/properties to a
> material (ether) which Einstein himself tells you NOT to--Einstein
> implies a proper model for the ether was not available during his
> lifetime, I do not see where that has changed, to date.
>
> Indeed, in pure form, equilibrium implies a static state--anything more
> implies an over unity condition (perpetual motion), the forces which
> drive the motion and birth of stars-planets and the expanding of the
> universe is/are NOT in a static state, in six billion years a static
> state has not come into being, in another six billion years it is not
> expected for it to come into stasis--only if this will remain true
> "forever" remains a question.
>
> As long as matter exists, the above will, seemingly, remain true. A
> state of "un-equilibrium" exists in the sheer fact that all matter has
> been ripped from the very fabric of the ether--this I suspect is a most
> unnatural state of affairs (no one can be sure, for sure--and we only
> have one example to view! Other explanations exist ...) ... we will
> know when we have "seen" the ether and know of the laws/rules which
> govern it and its' un-ponder-able properties.
>
> Regards,
> JS

I believe we view aether differently as well as the term equilibrium.
The later describes what is balanced within a border and where
momement of the
interned is reacted by countermovement in the shape of the border.
This is why I keep comming back to Gauss

and his description of static particles. True the border varies in shape exposing
cracks or deformation of its borders where particles can escape before equilibrium
is reformed as internal forces or orbits correct their positions so the retaining border
becomes of uniform strength again. If the innards were not mobile and adaptive to change
then once the border was fractured it could not adapt and heal itself. This bordcer in itself
is balanced as part of other gravitational borders all of which are expanding and regenerating into
different border and thus expanding into the aether which has nothing to provide resistance.
The main point is that all that is contained must have movement so when the balanc eof equilibrium is momentarily broken
it is in a position to adapt its internal movements to attain equilibrium again. How else can one adapt to escaping particles and collisions
if there were not constant movementof that which holds together because of equilibrium.
True Richard will take exception to this as he views himself as Einsteins successor and is determined to block in his own eyes everything
except what spills from his own mouth with the suggestion that he knows all but has not yet decided to disclose it. The same with respect to his credentials that allows him to judge thoughts of others.
Art

1299. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 02:17:41 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbqccb$r2k$1@news.albasani.net>
Source record: 36517

art wrote:

> ...
> Art
>

Art:

You seek to answer the unanswerable, you seek to explain the unexplainable ... this is far from "being wrong." It simply proves that our knowledge is incomplete, at present. This is something we all hope to cure in the future. Now, we simply debate the different explanations which exist. Magnetic fields certainly play a prominent part in manipulations of EM waves/particles, and the opposite ... what is going on precisely is up for grabs, again, in my humble opinion.

The fact is, although I think we can see the stress lines in the ether with the simple iron filings, paper and magnet, we know nothing about it--indeed, the "proof of its' existence" I am citing might have yet another explanation. Indeed, at this point, ether almost requires a "leap of faith" such as necessary with a belief in God. By sheer definition we cannot even devise a bottle to hold a sample of ether.

However, cowards will run from the unknown, brave men will sit and discuss how to attempt to prove it, one way or another.

A system with equilibrium will, at some point, cease movement, unless there is an input of energy from an external source, this energy might appear cloaked in many forms. Can we at least agree upon this single point, first?

Regards,
JS

1300. Re: Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 02:21:41 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <QvadnVjzUshFKH3bnZ2dnUVZ_jOdnZ2d@giganews.com>
Source record: 36518

Ian White GM3SEK wrote:
> Bryan wrote:
> >There are many ways to install the 83-1SP/PL-259 plugs. The
> >instructions given on the Amphenol website
> >(http://www.amphenolrf.com/products/assemblyInstructions/274.pdf) will
> >show the basics. In addition to what Tam says (use LOTS of soldering
> >iron/gun heat, and get in/out fast), I found a way to solder the plugs
> >that have nickel plating on the connector body.
> >
> >Nickel doesn't like to solder worth a darn, and it will take lots of
> >heat to burn through it. By the time you do, the cable dielectric (and
> >possibly the insulator on the cheaper plugs) will turn to mush. It's
> >worse with foamed polyethylene vs solid polyethylene coaxial cable.
> >Before assembling the plug onto the cable, remove the plating on the
> >inside circumference of the plug. A small round file, X-acto knife, or
> >1/8" drill bit will do the trick.
>
> An even better way is to file *across* the holes, cutting the brass body
> down to two thin feather edges which are easier to solder.

Even better is to do both. Removing the plating inside the hole will
promote the flow of solder across the junction of connector body to shield,
which is what we want.

> > My soldering "weapon of choice" is a Weller #8200 100/140W unit.
> >
> For anyone who doesn't already have a large iron, I'd recommend buying
> an inexpensive hot air gun instead.
>
> If you use the hot air gun to pre-heat the connector body, your existing
> 25W iron can handle the soldering part.

Preheating the connector is a technique I've used, when I didn't have a
large iron handy.

> Another use for the hot air gun is with heat-shrink tubing, so it's $20
> well spent. The only risk is that someone may ask you to strip paint
> with it.
> --
>
> 73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

Bryan WA7PRC

1301. Re: inquiry from a newb

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 02:34:01 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <tM2Ei.136448$rX4.34247@pd7urf2no>
Source record: 36519

Steve wrote:

> On Sep 5, 3:28 pm, Harry7 <cpa...@gmail.com> wrote:
>
>>I might ask how much room do you have - indoors,attic, outdoors,
>>rooftop, etc.? Don't assume you need an acre for a decent antenna.
>>
>>Let us know how much area you have to work with & we can make
>>suggestions.
>>
>>Terry
>>W8EJO
>>
>>
>>
>>
>>>I've been a SWLer for years and am considering getting a ham license.
>>>However, I live in an urban area (Brooklyn) and wonder just how
>>>effectively I can transmit from here. Big outdoor antennas and ground
>>>radials are out of the question.
>>
>>>Obviously I'd be starting out on VHF and UHF frequencies, perhaps with
>>>only a modest handheld transceiver. Handhelds look pretty puny, but is
>>>this appearance deceptive? Would one allow me to talk to lots of
>>>people and learn from them?
>>
>>>Any insights you can share will be greatly appreciated.
>>
>>>Steve- Hide quoted text -
>>
>>- Show quoted text -
>
>
> I live in the top story of an old Victorian house. So, I'm relatively
> high up, and there's a big, sturdy fire escape at the rear of the
> house. There's also a modest backyard that I have access to, but with
> the exception of a small, receive-only loop antenna, I've had bad luck
> putting antennas back there. Eventually I might be able to arrange an
> antenna on the roof of the house, so long as it's not too big and
> noticeable. However, I think any antenna I use though will require a
> balanced design because my grounding options are severly limited.
> Maybe a small transmitting loop would be a good choice?
>
You might want to try a magnetic loop -- it's 3 ft in diameter and

thousands of apartment dwelling hams are on the air with them and having fun.

Irv VE6BP

1302. requesting reception reports NDB beacon

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 03:00:24 UTC
From: WA4SZE@gmail.com
Message-ID: <1189134024.315816.199930@22g2000hsm.googlegroups.com>
Source record: 36520

Greetings:

Requesting reception reports on our new NDB beacon LYQ on 529 KHZ
just below the AM broadcast band.

Can you hear it??? What is your QTH???? please post reports
here!!

We tried a shunt fed tower some weeks back and gave up on it due to
poor beacon range.

We are now using a 130 feet high flat top antenna with a horizontal
run of 250 feet between two 140 feet high towers.

The flat top antenna has a Vertical wire 130 feet high connected dead
center to a cable that is suspended and insulated from the two
support towers.

This antenna is an 'traditional' NDB beacon antenna

Driving in my car with the car radio tuned to 530 khz I can hear the
beacon loud and clear for 40 miles!!

When we used the shunt fed tower tuned to a VSWR of 1.1 to 1 the
range at best was
15 miles

Using the same ground radials

we are located about 50 miles south of Nashville,TN just off of
I-24 Manchester,TN

Thanks for the reports!!!!

1303. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 05:21:35 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbqn56gfo1@news.albasani.net>
Source record: 36521

art wrote:

> ...
> I believe we view aether differently as well as the term equilibrium.
> ...
> Art
>

Art:

I found an interesting fellow on the net, here is a .pdf of his free ebook: (chapter 8 I found very interesting)

http://www.teslaphysics.com/files/Detection.pdf

If you would like to read it in .html instead:

http://www.teslaphysics.com/

Look near the bottom of the page for the book, but this page itself is interesting.

He has done some experimenting and claims to have detected the ether. He cites another fellows experiments which his own experiments followed.

Beware and be warned, his thinking challenges Einsteins' own ...

Regards,
JS

1304. Substitute wire in Trap?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 06:16:54 UTC
From: Clayton <Evans8119@aol.com>
Message-ID: <1189145814.099177.71200@r29g2000hsg.googlegroups.com>
Source record: 36522

Hi,
I am replacing the wire in a trap on my 3 element Tri-Band beam
antenna...
The wire is 25 turns of approximately 10 gauge on a 1.210 inch form
diameter, with a coil length of 3 inches(these numbers are
approximate).
I am unable to get the exact gauge(10 AWG) of wire and was wondering
if there would be any adverse effects in using a slightly smaller
gauge wire in place of it,say 12 gauge or so...?

Any help with this would be greatly Appreciated
Thank You

1305. Re: Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 06:36:25 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <i6h$13BpFP4GFAEJ@ifwtech.co.uk>
Source record: 36523

Bryan wrote:
>> An even better way is to file *across* the holes, cutting the brass body
>> down to two thin feather edges which are easier to solder.
>
>Even better is to do both. Removing the plating inside the hole will
>promote the flow of solder across the junction of connector body to
>shield, which is what we want.
>
Sorry, I cannot have explained that clearly enough.

If you do what I suggested, there is no point in removing the plating
from the inside wall of the hole first, because you're going to file all
of that metal away.

Keep filing until the inside wall is completely gone, and the hole is
surrounded by a sharp edge that tapers to zero. At that point, stop
filing - it's ready for soldering.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1306. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 07:51:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0qs1e3109n7lhbg0kufgne1m8d7l295ij5@4ax.com>
Source record: 36524

On Thu, 06 Sep 2007 16:07:09 -0700, Jim Kelley <jwkelley@uci.edu>
wrote:

>Richard Clark wrote:
>
>> On Thu, 06 Sep 2007 12:47:46 -0700, K7ITM <k7itm@msn.com> wrote:
>>
>>
>>>On Sep 5, 5:02 pm, Jim Kelley <jwkel...@uci.edu> wrote:
>>>...
>>>
>>>>I'd like to offer m = E/c^2 as a guess.
>>>>
>>>>73, ac6xg
>
>> "E=pc."
>
>Yes, and p=mv,

Hi Jim,

Tom opines about my reading, but it is about the writing from the good
doctor that we find (in regard to your snippet above):
"we find that the momentum relation p=mv is
only an approximation. It is only correct when speed (v) is much
smaller than the speed of light (c).
which distinctly contradicts your tie-in:
>so when v=c as is true for photons, and we substitute
>mc for p in the equation above and then solve for m (the mass of a
>photon was the original question), we're back at the equation offered
>previously.

The circularity of Dr. Ken Mellendorf's foggy writing might suggest
it, if it weren't otherwise nipped in the bud by the bald statement.
"For a particle with no mass, the relation reduces to E=pc.
This works for a photon."

Hence the proximity of this to p=mv is textual, not factual.

What is the term p? Could it be (p)hoton? I've speculated about
Planck's constant (which you comment upon, below), but I find it very
sloppy writing for Dr. Mellendorf to wander into his own naming
conventions. Migrating through
E = mcï¿½
something all can agree is a fair basis to begin with, we then have
expressly for a (p)hoton:

E = pc
Substituting for the previous E
pc = mcï¿½
divide both sides by c
p = mc
which to me is new territory. What is mass times the speed of light
for a particle that has no mass?

Perhaps Tom's special reading skills can rescue this p term from the
oblivion of E = 0 for a (p)hoton.

>But we usually relate more directly to the frequency (or wavelength)
>of the photon rather than its energy or momentum, so in such a case
>E=h*nu would provide a more direct route to its mass equivalent.

Yes, and it seems your daughter trumped me on Planck once before. ;-)

It is exceedingly obvious that the link offered amounts to
considerable wool gathering. Or maybe its the late hour....

73's
Richard Clark, KB7QHC

1307. Re: requesting reception reports NDB beacon

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 10:46:40 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <gpm7r4-93n.ln1@p400bob.personal.cox.net>
Source record: 36525

I can "see" a CW signal on 529KHz with baudline on the Linux PC, the TS680S HF TXCVR and the 7MHz dipole!. It is currently about 10dB above the (FFT) noise here. (6AM) I can barely or not at all hear it.

I am not however satisfied that it isn't a birdie or other RF source. (It disappears with the antenna unplugged) There appears to be no ident on the signal. What is the period and method of identification?

Cheers Bob W5/VK2YQA Longview East Texas

WA4SZE@gmail.com wrote:
>
> Greetings:
>
> Requesting reception reports on our new NDB beacon LYQ on 529 KHZ
> just below the AM broadcast band.

1308. Re: Substitute wire in Trap?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 11:09:18 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <9dGdnVcLYsTCrHzbnZ2dnUVZ_tqtnZ2d@bright.net>
Source record: 36526

Where do you live that you can't get 10 gauge wire?

If you use 12 gauge wire, you will likely end up with the frequency of the trap being off. If you have a dip meter, you can measure the resonant frequency and adjust the number of turns and/or wire spacing to get it where it needs to be.

Scott
N0EDV

Clayton wrote:

> Hi,
> I am replacing the wire in a trap on my 3 element Tri-Band beam
> antenna...
> The wire is 25 turns of approximately 10 gauge on a 1.210 inch form
> diameter, with a coil length of 3 inches(these numbers are
> approximate).
> I am unable to get the exact gauge(10 AWG) of wire and was wondering
> if there would be any adverse effects in using a slightly smaller
> gauge wire in place of it,say 12 gauge or so...?
>
> Any help with this would be greatly Appreciated
> Thank You
>

--
Scott
http://corbenflyer.tripod.com/
Gotta Fly or Gonna Die
Building RV-4 (Super Slow Build Version)

1309. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 13:17:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbrj1n$6ch$1@news.albasani.net>
Source record: 36527

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

More:

http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20070906005616&newsLang=en

Regards,
JS

1310. Re: Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 13:43:40 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <FMKdneGWnuEVyHzbnZ2dnUVZ_q-jnZ2d@comcast.com>
Source record: 36528

"Ian White GM3SEK" <gm3sek@ifwtech.co.uk> wrote in message
news:i6h$13BpFP4GFAEJ@ifwtech.co.uk...
> Bryan wrote:
>>> An even better way is to file *across* the holes, cutting the brass body
>>> down to two thin feather edges which are easier to solder.
>>
>>Even better is to do both. Removing the plating inside the hole will
>>promote the flow of solder across the junction of connector body to
>>shield, which is what we want.
>>
> Sorry, I cannot have explained that clearly enough.
>
> If you do what I suggested, there is no point in removing the plating from
> the inside wall of the hole first, because you're going to file all of
> that metal away.
>
> Keep filing until the inside wall is completely gone, and the hole is
> surrounded by a sharp edge that tapers to zero. At that point, stop
> filing - it's ready for soldering.
>
>
> --
>
> 73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.co.uk/g3sek

Let me see if I have this straight. You are filing on the round part of the connector barrel where it has the 2, 3, or 4 holes for soldering to the shield. You use a narrow flat file, and file just short of the point where the holes would become oblong?

Tam/WB2TT

1311. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 14:13:49 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <x0dEi.5324$JD.3272@newssvr21.news.prodigy.net>
Source record: 36529

Richard Clark wrote:
> What is mass times the speed of light
> for a particle that has no mass?

A nonsense question since "no mass" for a
photon is associated with it being *at rest*,
i.e. *not moving at the speed of light*.

> Perhaps Tom's special reading skills can rescue this p term from the
> oblivion of E = 0 for a (p)hoton.

For a photon possessing zero rest mass,
traveling at the speed of light yields
a finite measurable mass.
--
73, Cecil http://www.w5dxp.com

1312. Re: Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 15:01:03 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <o6+Vr7OveW4GFA1a@ifwtech.co.uk>
Source record: 36530

Tam/WB2TT wrote:
>
>Let me see if I have this straight. You are filing on the round part of
>the connector barrel where it has the 2, 3, or 4 holes for soldering to
>the shield. You use a narrow flat file, and file just short of the
>point where the holes would become oblong?
>
Pretty much... I hope this picture helps make more sense of it:
http://www.ifwtech.co.uk/g3sek/misc/pl259.jpg

I actually use a 5/32 round file or rasp. Stop filing when the hole is
just beginning to become larger, and has thin, sharp edges all round.
The thin edges and bare brass make soldering much easier.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

1313. Re: Has anybody ever???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 15:58:50 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <46E1753A.5080503@bellsouff.net>
Source record: 36531

Richard Clark wrote:
> On Mon, 3 Sep 2007 16:06:50 -0400, "merlin-7" <merlin-7@sc.rr.com>
> wrote:
>
>> Keep in mind that while driving in a convoy it is not a good idea to have
>> to use antenna A-B switches etc...I would much rather just turn on the rig I
>> need and off the one I do not need at the time.
>
> Use two relays. Each relay opens the RF path to each antenna when
> unpowered. Then energize each relay (appropriately) when a rig is
> turned on. These can be cheap relays because they are either always
> on or always off (according to the state of either rig).
>
> NOW, if you emphasized us to read this section, and then slip us a
> mickey that you "might" need to monitor the other band you are not
> working, then shame on you.
>
> 73's
> Richard Clark, KB7QHC

Or split the difference between the two bands when you trim the antenna for lowest SWR. Then turn the power back in both rigs (wink - dang, something flew into my eye) to around 5 watts (if you have a 100 watt rig) and don't worry about the SWR. Not enough heat being developed at 5 watts and a high SWR to damage anything if the rig is rated for 100 watts into an SWR of 1.5:1 (or thereabouts) or lower. You don't need no esteenkin' switches or relays.

Of course, "I" wouldn't do anything like this. Too much too lose.

Ed, NM2K

1314. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 16:08:21 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <1189181301.963881.292100@y42g2000hsy.googlegroups.com>
Source record: 36532

On Sep 7, 12:51 am, Richard Clark <kb7...@comcast.net> wrote:

> The circularity of Dr. Ken Mellendorf's foggy writing might suggest
> it, if it weren't otherwise nipped in the bud by the bald statement.

On the other hand perhaps Dr. Mellendorf has some expertise in the
subject.

> What is the term p? Could it be (p)hoton? I've speculated about
> Planck's constant (which you comment upon, below), but I find it very
> sloppy writing for Dr. Mellendorf to wander into his own naming
> conventions.

I think you should make those comments directly to him so that he an
opportunity to respond. Shall I forward them for you? :-)

> What is mass times the speed of light
> for a particle that has no mass?

Seems like something is wrong in that sentence, doesn't it.

> Perhaps Tom's special reading skills can rescue this p term from the
> oblivion of E = 0 for a (p)hoton.

It's also possible that since E=0 is wrong, the assumption that p=0
might also be wrong. If not, then you'll need to explain radiation
pressure in an all new way.

> Yes, and it seems your daughter trumped me on Planck once before. ;-)

She's better at math than I ever was.

73, ac6xg

1315. Re: Ideas for Simple Homemade 17 Metre Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 16:13:08 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <46E17894.5000709@bellsouff.net>
Source record: 36533

nm5k@wt.net wrote:
> On Sep 3, 3:56 am, Andiroo <a.rich...@btinternet.com> wrote:
>> All
>>
>> Can anyone point me to some simple designs for a home made 17 metre
>> antenna. I am looking for some simple half wave dipole type designs.
>
> 468/18.1mhz=25.85 total feet for a half wave dipole. Divide by two for
> each leg.
> Feed with 50 ohm coax. Can't get much simpler than that. Can't get
> much more
> efficient either unless maybe you have to run 500 ft of coax. . :)
> MK
>
>

MK has given the proper way to do it - but then there is "MY" way. <G>

I have one of those cheap ($200) metal sheds that I bought from Home Depot a while back. The kind that takes you and someone else nearly an entire weekend to assemble because of all of the screws.

Well, mine leaks water, but it is still better than having nothing at all...I think.

Anyway, if you happen to have one of these all metal sheds, plop a magmount, or a through the metal mount, with a 17 meter Hamstick on it and call it a done deal. Will it work as well as a dipole? In some directions yes and in some directions no. You won't equal the dipole's broadside radiation, but you can stomp the grape juice out of its end point radiation. <G>

If the band is open, you don't need a fancy antenna or a lot of power. If the band isn't open, no one is going to hear you even if you are running full legal limit power output. I run my little Yaesu FT-817ND QRP rig on this set up and it talks around the world - when the bands are open.

The good thing about this set up, if you're a digital and CW man, in addition to phone, is that you can replace the 17 meter Hamstick with any other band Hamstick and still have some fun. PSK-31, Amtor and Pactor with 5 thundering watts and a Hamstick will yield amazing results. The key is patience and knowing which Hamstick to put in place.

Gonna have a terrible storm and you're worried about your Hamstick? Well, you can always remove it - OR, you can buy ten quick disconnects off'n a fellow on eBay for a ridiculously low price and fold over and lash down your precious Hamstick.

Anyone can talk all over the world with the best antenna, highest power output, etc. QRP can bring back the excitement of operating once again, assuming you're not a 75 meter rag chewer. For the latter, they truly need the best antenna and amp in order to be heard. Just the nature of the band. However, scoot down to 80 meters and once again, QRP and minimal antennas gain a great measure of equal footing.

Ed, NM2K

1316. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 16:22:00 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1189182120.433230.236150@50g2000hsm.googlegroups.com>
Source record: 36434

On 6 Sep, 22:21, John Smith <assemblywiz...@gmail.com> wrote:
> art wrote:
> > ...
> > I believe we view aether differently as well as the term equilibrium.
> > ...
> > Art
>
> Art:
>
> I found an interesting fellow on the net, here is a .pdf of his free
> ebook: (chapter 8 I found very interesting)
>
> http://www.teslaphysics.com/files/Detection.pdf
>
> If you would like to read it in .html instead:
>
> http://www.teslaphysics.com/
>
> Look near the bottom of the page for the book, but this page itself is
> interesting.
>
> He has done some experimenting and claims to have detected the ether.
> He cites another fellows experiments which his own experiments followed.
>
> Beware and be warned, his thinking challenges Einsteins' own ...
>
> Regards,
> JS

John, I have only stated how I as an individual views things.
Since I have not studied physics all that much it can be seen as just
guessing.
Reading Planck at the moment while wife is in hospital ICU so time is
limited all the way around
Regards
Art

1317. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 16:57:37 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fbrvu1$t16$1@f04n12.cac.psu.edu>
Source record: 36435

John Smith wrote:

>> way...
>> (no Virginia, that is not a vacuum inside the radiometer, just high
>> altitude - and yes there is no Santa Claus - now come over here and
>> sit on my lap)
>>
>> denny
>>
>
> Really? So, someone should tell the engineers who have proposed the
> "solar sail?" A massive silvered mylar sail which would be unfolded in
> space and sail spacecraft on the "solar winds", photons reflected
> mass--actually.
>
> You guys missed your calling ... you could have been "fact debunkers!"

I'm no expert (although play one on TV), but I thought that the process at work was reflection of the photon, which shows a measurable doppler shift. The doppler shift lowers it's wavelength. The wavelength increases, and energy decreases. That energy has to go somewhere, and it goes into the sail and takes the spacecraft or whatever is attached along for the ride. So it really isn't a mass issue - although it is possible that the solar wind which does have mass and may contribute some small push on the sail. But that is another issue.Photon push is a radiation pressure energy transfer mechanism.

- 73 de Mike KB3EIA -

1318. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 16:58:25 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fbrvvh$t16$2@f04n12.cac.psu.edu>
Source record: 36436

Richard Clark wrote:
> On Sat, 01 Sep 2007 06:00:46 -0700, Denny <k8do@mailblocks.com> wrote:
>
>> Uhhh, gawd, I hate to even get into THIS mess... But, somebody has
>> gotta do it...
>
> Hi Denny,
>
> Well, for such a melodramatic dip of your toe into this cesspool, I
> hope you brought your snorkel.

Or at least a fork and spoon...

- 73 de Mike KB3EIA -

1319. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 17:29:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fbs1q8$a0s$1@news.albasani.net>
Source record: 36437

Michael Coslo wrote:

> ...
> some small push on the sail. But that is another issue.Photon push is a
> radiation pressure energy transfer mechanism.
>
> - 73 de Mike KB3EIA -

Ahhh, you are such a "jokester!" I always enjoy a good laugh, ha ha ha.

JS

1320. Re: Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 18:20:30 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <u853e39rejskbdoemr0joj848tkd1f83i6@4ax.com>
Source record: 36438

On Fri, 7 Sep 2007 16:01:03 +0100, Ian White GM3SEK
<gm3sek@ifwtech.co.uk> wrote:

>Tam/WB2TT wrote:
>>
>>Let me see if I have this straight. You are filing on the round part of
>>the connector barrel where it has the 2, 3, or 4 holes for soldering to
>>the shield. You use a narrow flat file, and file just short of the
>>point where the holes would become oblong?
>>
>Pretty much... I hope this picture helps make more sense of it:
>http://www.ifwtech.co.uk/g3sek/misc/pl259.jpg
>
>I actually use a 5/32 round file or rasp. Stop filing when the hole is
>just beginning to become larger, and has thin, sharp edges all round.
>The thin edges and bare brass make soldering much easier.

I use a Weller SP-175 iron. With 175 watts and a 5/8" tip, that
combination of heat and metal mass means I only spend 3 or 4 seconds
at each braid hole, and no filing is needed even on cheap nickle
plugs.

To each his own :-)

bob
k5qwg

1321. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 18:30:03 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1189189803.574386.293240@o80g2000hse.googlegroups.com>
Source record: 36439

On Sep 7, 9:08 am, Jim Kelley <jwkel...@uci.edu> wrote:
> On Sep 7, 12:51 am, Richard Clark <kb7...@comcast.net> wrote:
>
> > The circularity of Dr. Ken Mellendorf's foggy writing might suggest
> > it, if it weren't otherwise nipped in the bud by the bald statement.
>
> On the other hand perhaps Dr. Mellendorf has some expertise in the
> subject.
>
> > What is the term p? Could it be (p)hoton? I've speculated about
> > Planck's constant (which you comment upon, below), but I find it very
> > sloppy writing for Dr. Mellendorf to wander into his own naming
> > conventions.
>
> I think you should make those comments directly to him so that he an
> opportunity to respond. Shall I forward them for you? :-)
>
> > What is mass times the speed of light
> > for a particle that has no mass?
>
> Seems like something is wrong in that sentence, doesn't it.
>
> > Perhaps Tom's special reading skills can rescue this p term from the
> > oblivion of E = 0 for a (p)hoton.
>
> It's also possible that since E=0 is wrong, the assumption that p=0
> might also be wrong. If not, then you'll need to explain radiation
> pressure in an all new way.
>
> > Yes, and it seems your daughter trumped me on Planck once before. ;-)
>
> She's better at math than I ever was.
>
> 73, ac6xg

For the lurkers who may care to sift a tiny bit of wheat from the
chaff, see common physics symbol usage at
http://www.alcyone.com/max/reference/physics/symbols.html,
http://selland.boisestate.edu/jbrennan/physics/notes/Introduction/physics_symbols.htm,
http://www.hazelwood.k12.mo.us/~grichert/sciweb/formulas.htm and
others. If you're reading physics writings, it helps to have an
understanding of the language of the physicist.

See concise explanations about photon momentum and relativistic
momentum, energy and mass in general at

http://hyperphysics.phy-astr.gsu.edu/hbase/relativ/relmom.html,
http://physics.mtsu.edu/~phys2020/Lectures/L6-L11/L8/Relativistic_Momentum/relativistic_momentum.html
and others.

1322. Re: Substitute wire in Trap?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 19:37:03 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1189193823.733779.47160@d55g2000hsg.googlegroups.com>
Source record: 36440

On Sep 6, 11:16 pm, Clayton <Evans8...@aol.com> wrote:
> Hi,
> I am replacing the wire in a trap on my 3 element Tri-Band beam
> antenna...
> The wire is 25 turns of approximately 10 gauge on a 1.210 inch form
> diameter, with a coil length of 3 inches(these numbers are
> approximate).
> I am unable to get the exact gauge(10 AWG) of wire and was wondering
> if there would be any adverse effects in using a slightly smaller
> gauge wire in place of it,say 12 gauge or so...?
>
> Any help with this would be greatly Appreciated
> Thank You

I echo Scott's question: why is 10AWG so difficult to get?

But I also ran some numbers for you in a program I use often and trust. Even if the absolute values are off a bit, the relative values should be very close. Here's what I got:

3" long, 1.21" ID, 25 turns, 0.120" winding pitch = 3"/25

Parameter	10AWG	12AWG
inductance	7.148uH	7.053uH
wire length	103.1"	101.4"
Qu@14MHz	592	660
Equiv. par. C	1.68pF	1.67pF
Self-resonance	45.9MHz	46.4MHz

The inductance error could be corrected by winding it slightly larger diameter; but it should be easy enough to just re-tune. The higher Qu of the smaller wire is probably accurate; the larger wire is wound too close-spaced to get the optimum Qu.

Cheers,
Tom

1323. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 20:30:23 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fbsccv$t1k$1@f04n12.cac.psu.edu>
Source record: 36441

John Smith wrote:
> Michael Coslo wrote:
>
> > ...
>> some small push on the sail. But that is another issue.Photon push is
>> a radiation pressure energy transfer mechanism.
>>
>> - 73 de Mike KB3EIA -
>
> Ahhh, you are such a "jokester!" I always enjoy a good laugh, ha ha ha.

At your service!

- 73 de Mike KB3EIA -

1324. Re: inquiry from a newb

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 20:31:40 UTC
From: charlie <wehatespam@wymsey.co.uk>
Message-ID: <V8mdnf2FU8e7KHzbnZ2dnUVZ8silnZ2d@pipex.net>
Source record: 36442

Steve wrote:

>
> I live in the top story of an old Victorian house. So, I'm relatively
> high up, and there's a big, sturdy fire escape at the rear of the
> house. There's also a modest backyard that I have access to, but with
> the exception of a small, receive-only loop antenna, I've had bad luck
> putting antennas back there. Eventually I might be able to arrange an
> antenna on the roof of the house, so long as it's not too big and
> noticeable. However, I think any antenna I use though will require a
> balanced design because my grounding options are severly limited.
> Maybe a small transmitting loop would be a good choice?
>

Steve,

You are right on the balanced antenna, there is no way you can have
an RF earth from your height. I live in a first floor apartment and
have a fan dipole (80m to 6m) in the attic fed via a balun and then
co-ax to the rig. There are details on my website.

Charlie.

--
M0WYM
www.radiowymsey.org

1325. Re: Results: Carolina Windom

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 20:38:34 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.09.07.20.38.33.394081@from.qrz.com>
Source record: 36443

On Wed, 05 Sep 2007 20:34:40 -0400, Bob Schreibmaier wrote:

> I used legs of 45 and 90 feet. The SWR was about 1.0 at
> 3.5 MHz and 1.3 at 3.6 MHz. Actually, it didn't reach 2.0
> until about 3.75 MHz. Lowest SWR on 40 meters was at 7.2 MHz
> at about 1.0 and was low across the band. The lowest SWR on
> 20 meters was at 14.35 MHz at about 1.0, but was 1.8 at the
> bottom of the band.

Good afternoon, Bob.

Since it's 92 degrees and about 95 percent humidity out, I decided now was a good time to go outside and do some antenna work. :-)

I reduced one leg and increased the other to get the 45 and 90 feet you suggest, but I must have cut it a bit long, because I'm getting SWR dips of 1.12 at 3350, 1.1 at 6.701, and 1.4 at 14.4.

Band edges are:

3.50 -- 1.5
4.00 -- 3.8
7.00 -- 1.75
7.30 -- 2.8
14.00 -- 1.9
14.35 -- 1.44

This is the Carolina Windom configuration (more or less...) 4:1 W2AU type balun, 22 feet of RG-8X, and a 1:1 current unun, then 25 feet of feedline which is currently sort of looped back on itself (really only need about 8 feet).

I was really hoping to get the antenna up higher than it is, because right now the bottom 3 or 4 feet of the 22-foot segment, and the unun, are lying on the roof, but it's as high as I'm going to be able to get it for the foreseeable future.

Performance seems on a par with, or slightly inferior to, my 180-foot inverted V fed with ladder line and an LDG autotuner. But, I haven't really had a chance to test it yet. And, the inverted V connects to my old IC-735 which has far and away the very BEST non-DSP noise blanker I've ever used, much better than the one on the TS-940S which currently hosts the CW.

When I get a chance I'll dig out a coax switch and connect both antennas to the same radio for some apples to apples comparison tests.

1326. Re: inquiry from a newb

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 20:55:24 UTC
From: Harry7 <cpa599@gmail.com>
Message-ID: <1189198524.941117.136740@g4g2000hsf.googlegroups.com>
Source record: 36444

On Sep 6, 8:36 pm, Steve <sdanie...@speakeasy.net> wrote:
> On Sep 5, 3:28 pm, Harry7 <cpa...@gmail.com> wrote:
>
>
>
>
>
> > I might ask how much room do you have - indoors,attic, outdoors,
> > rooftop, etc.? Don't assume you need an acre for a decent antenna.
>
> > Let us know how much area you have to work with & we can make
> > suggestions.
>
> > Terry
> > W8EJO
>
> > > I've been a SWLer for years and am considering getting a ham license.
> > > However, I live in an urban area (Brooklyn) and wonder just how
> > > effectively I can transmit from here. Big outdoor antennas and ground
> > > radials are out of the question.
>
> > > Obviously I'd be starting out on VHF and UHF frequencies, perhaps with
> > > only a modest handheld transceiver. Handhelds look pretty puny, but is
> > > this appearance deceptive? Would one allow me to talk to lots of
> > > people and learn from them?
>
> > > Any insights you can share will be greatly appreciated.
>
> > > Steve- Hide quoted text -
You might try a horizontal loop around the perimeter of the top floor
of your building. feed it anywhere along the circumferencewith open
wire & a tuner & youll have a decent all band antenna (also relatively
quiet).

> > - Show quoted text -
>
> I live in the top story of an old Victorian house. So, I'm relatively
> high up, and there's a big, sturdy fire escape at the rear of the
> house. There's also a modest backyard that I have access to, but with
> the exception of a small, receive-only loop antenna, I've had bad luck
> putting antennas back there. Eventually I might be able to arrange an
> antenna on the roof of the house, so long as it's not too big and
> noticeable. However, I think any antenna I use though will require a
> balanced design because my grounding options are severly limited.

> Maybe a small transmitting loop would be a good choice?- Hide quoted text -
>
> - Show quoted text -

1327. Re: Has anybody ever???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 21:51:42 UTC
From: merlin-7 <merlin-7@sc.rr.com>
Message-ID: <46e1c86f$0$17142$4c368faf@roadrunner.com>
Source record: 36445

> >
> >> Keep in mind that while driving in a convoy it is not a good idea to
have
> >> to use antenna A-B switches etc...I would much rather just turn on the
rig I
> >> need and off the one I do not need at the time.
> >
> > Use two relays. Each relay opens the RF path to each antenna when
> > unpowered. Then energize each relay (appropriately) when a rig is
> > turned on. These can be cheap relays because they are either always
> > on or always off (according to the state of either rig).
> >
> > NOW, if you emphasized us to read this section, and then slip us a
> > mickey that you "might" need to monitor the other band you are not
> > working, then shame on you.
> >
> > 73's
> > Richard Clark, KB7QHC
>
>
> --------------
>
>
> Or split the difference between the two bands when you trim the antenna
> for lowest SWR. Then turn the power back in both rigs (wink - dang,
> something flew into my eye) to around 5 watts (if you have a 100 watt
> rig) and don't worry about the SWR. Not enough heat being developed at 5
> watts and a high SWR to damage anything if the rig is rated for 100
> watts into an SWR of 1.5:1 (or thereabouts) or lower. You don't need no
> esteenkin' switches or relays.
>
> Of course, "I" wouldn't do anything like this. Too much too lose.
>
> Ed, NM2K

The 11 meter rig is A cobra 29 limited classic...It is stock. I have no
need or wish to modify it as the only time I use it is to talk to truckers,
going in the opposite direction. (I dry out buildings for a living and it's
nice to know what roads are open and the last place to get fuel when going
into an area hit by a hurricane)

The 10 meter rig is an old rat-shack HTX-10 ...25 watts.

The cobra does have some kind of a manual tuner in it. I have no idea how
well it could match an antenna cut for say 28.8 MHZ. I would think not very

well.

I have no problem with the 11 meter side having a high swr as long as it does not damage the rig. Also, the 11 meter rig has a little red light that comes on if the antenna is mismatched and I am not sure if the rig cuts the output power in that situation.

I guess I could always have 2 whips. One cut for 11 and one cut for 10 and change them when needed but I was trying to avoid that..

1328. Re: Substitute wire in Trap?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 22:31:27 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99A556AD497E1nonenowhere@61.9.191.5>
Source record: 36446

K7ITM <k7itm@msn.com> wrote in news:1189193823.733779.47160
@d55g2000hsg.googlegroups.com:

Tom,

...
> But I also ran some numbers for you in a program I use often and
> trust. Even if the absolute values are off a bit, the relative values
> should be very close. Here's what I got:
>
> 3" long, 1.21" ID, 25 turns, 0.120" winding pitch = 3"/25
>
> Parameter 10AWG 12AWG
> inductance 7.148uH 7.053uH
> wire length 103.1" 101.4"
> Qu@14MHz 592 660
> Equiv. par. C 1.68pF 1.67pF
> Self-resonance 45.9MHz 46.4MHz
>

I tried the same scenario in the inductance calculator at
http://hamwaves.com/antennas/inductance.html .

It suggests that the inductance is quite a bit lower (~6uH), but
interestingly, that larger diameter wire gives a lower inductance rather
than higher.

That outcome seems counter-intuitive considering an ideal solenoid, but I
suspect it is caused by a very different estimate of the self capacitance
(0.6pF).

Owen

1329. Re: Substitute wire in Trap?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 23:40:07 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <w7ydnSYhQuTOfHzbnZ2dnUVZ_rignZ2d@comcast.com>
Source record: 36447

"Clayton" <Evans8119@aol.com> wrote in message
news:1189145814.099177.71200@r29g2000hsg.googlegroups.com...
> Hi,
> I am replacing the wire in a trap on my 3 element Tri-Band beam
> antenna...
> The wire is 25 turns of approximately 10 gauge on a 1.210 inch form
> diameter, with a coil length of 3 inches(these numbers are
> approximate).
> I am unable to get the exact gauge(10 AWG) of wire and was wondering
> if there would be any adverse effects in using a slightly smaller
> gauge wire in place of it,say 12 gauge or so...?
>
> Any help with this would be greatly Appreciated
> Thank You
>
Do you want to explain why you are replacing the wire?

Tam/WB2TT

1330. Re: Substitute wire in Trap?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-07 23:56:30 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <-p-dnX4AZb-FeHzbnZ2dnUVZ_hadnZ2d@comcast.com>
Source record: 36448

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
news:w7ydnSYhQuTOfHzbnZ2dnUVZ_rignZ2d@comcast.com...
>
> "Clayton" <Evans8119@aol.com> wrote in message
> news:1189145814.099177.71200@r29g2000hsg.googlegroups.com...
>> Hi,
>> I am replacing the wire in a trap on my 3 element Tri-Band beam
>> antenna...
>> The wire is 25 turns of approximately 10 gauge on a 1.210 inch form
>> diameter, with a coil length of 3 inches(these numbers are
>> approximate).
>> I am unable to get the exact gauge(10 AWG) of wire and was wondering
>> if there would be any adverse effects in using a slightly smaller
>> gauge wire in place of it,say 12 gauge or so...?
>>
>> Any help with this would be greatly Appreciated
>> Thank You
>>
> Do you want to explain why you are replacing the wire?
>
> Tam/WB2TT
I have found that most electrical supply houses carry 10 ga solid wire..
probably covered - so that you would have to strip off the jacket..
73's Howard W3CQH

1331. Re: Checking Coax Connextion

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-08 01:21:18 UTC
From: "Roger (K8RI)" <validaddress@my.com>
Message-ID: <7ot3e3tpdr3ja456mckas0p12297ief13i@4ax.com>
Source record: 36449

Wouldn't it be simpler, cheaper, and easier to just use crimp connectors? There is the cost of the crimping tool and die set, but it's a one time investment, The cable is much easier to prepare whether you strip it by hand or use a stripper, and the connections are much more mechanically sound than the standard PL-259.

BTW I do solder the center pin even after crimping.

Good, silver plated PL-259s run on the order of $2.50 each (give or take depending on how many you purchase. Silver plated N-type connectors run around $5.00 USD, again give or take depending on how many you purchase and they use the same die set as the PL-259s.

Considering cost and durability I've gone to all crimp connectors in place of the solder type.

I water proof connectors and splices with MMM, flooded heat shrink tubing. http://www.rogerhalstead.com/ham_files/connectors.htm shows the application of the tubing although that was before I went to the crimp connectors.

73

Roger (K8RI)

1332. Re: requesting reception reports NDB beacon

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-08 01:31:47 UTC
From: "Roger (K8RI)" <validaddress@my.com>
Message-ID: <3ru3e3phl2kqcfv0terrhq82e4nps2cam1@4ax.com>
Source record: 36450

On Thu, 06 Sep 2007 20:00:24 -0700, WA4SZE@gmail.com wrote:

>Greetings:
>
>Requesting reception reports on our new NDB beacon LYQ on 529 KHZ
>just below the AM broadcast band.

I thought most were being decomissioned?

Roger (K8RI)

1333. Re: requesting reception reports NDB beacon

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-08 03:08:05 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <GmoEi.31452$L_7.22535@newsfe16.phx>
Source record: 36451

"Roger (K8RI)" <validaddress@my.com> wrote in message
news:3ru3e3phl2kqcfv0terrhq82e4nps2cam1@4ax.com...
> On Thu, 06 Sep 2007 20:00:24 -0700, WA4SZE@gmail.com wrote:
>
>>Greetings:
>>
>>Requesting reception reports on our new NDB beacon LYQ on 529 KHZ
>>just below the AM broadcast band.
>
> I thought most were being decomissioned?
>
> Roger (K8RI)

Quite a few left
See URL: http://www.airnav.com/navaids/

Enter in several frequencies in the NDB range - approx 200 kHz to 535 kHz

Lamont

1334. Re: requesting reception reports NDB beacon

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-08 03:22:23 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.09.08.03.22.21.550572@from.qrz.com>
Source record: 36452

On Thu, 06 Sep 2007 20:00:24 -0700, WA4SZE wrote:

> Requesting reception reports on our new NDB beacon LYQ on 529 KHZ
> just below the AM broadcast band.

I'm getting a foreign-language broadcast station on that frequency, on three radios (FT-1000, TS-940S, IC-735) and three antennas (two inverted Vs and a Carolina Windom).

Whatever it is is way too strong to hear an NDB through.

Rick WA1RKT
New Hampshire

1335. i can challenge you that "u can earn 10000$pm" online from HOME,OFFICE,CYBERCAFE...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-08 05:17:59 UTC
From: "sadee12thwill@gmail.com" <sadee12thwill@gmail.com>
Message-ID: <1189228679.350931.65090@k79g2000hse.googlegroups.com>
Source record: 36453

Hi frnds!!!
U can do this online jobs from ur home or from office and u can do
this from cybercafe(browsing centre) also ....

in this job there is no limited earnings(salary), from this job u can
earn unlimited because this gives the commisions for ur work......
ican challenge you that u can earn 1000-2500 for a week by spending
one hour time/day.the earnings may increase with increase in ur time
in this job .....

definitely u will earn more than the other ways.....................
http://www.freewebs.com/geteasyjob

1336. Dipole IN a rain gutter..

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-08 05:37:40 UTC
From: Joey <joey29034atyawwhodotcom>
Message-ID: <1pc4e351t324gp4kea4h90k6ap8j3uft0h@4ax.com>
Source record: 36454

Our vacation house has about 75 of plastic rain gutters on 3 sides of the flat roof at about 20 feet up (2 story). I was thinking about laying a 40m dipole in there with no connection to anything on the house. The only question I have is, is that there is a 2" strip of metal flashing about 8 inches above the gutter, for the length of it. How bad do you think this would screw up a dipole that's essentially parallel to it?
This station would be for emergency use primarily to talk with a station about 85 miles away with mountains in between so it doesn't need screaming dx performance... ground waves and cloud warming is all that's necessary...

Joey

1337. Re: Dipole IN a rain gutter..

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-08 12:53:38 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <mXwEi.49259$Um6.4778@newssvr12.news.prodigy.net>
Source record: 36455

Joey wrote:
> Our vacation house has about 75 of plastic rain gutters on 3 sides of
> the flat roof at about 20 feet up (2 story). I was thinking about
> laying a 40m dipole in there with no connection to anything on the
> house. The only question I have is, is that there is a 2" strip of
> metal flashing about 8 inches above the gutter, for the length of it.
> How bad do you think this would screw up a dipole that's essentially
> parallel to it?

It will act somewhat like guy wires which can cause
distortion in the radiation pattern and losses.
With any luck, it will have a high impedance and
not have much effect. Try it and see what happens.
Worst case, you may need to cut a slit every 1/4 WL
to keep the currents low.
--
73, Cecil http://www.w5dxp.com

1338. Re: Dipole IN a rain gutter..

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-08 20:48:47 UTC
From: Joey <joey29034atyawwhodotcom>
Message-ID: <vi26e3ptp110qqmo55v92nfs020au5n1c0@4ax.com>
Source record: 36456

On Sat, 08 Sep 2007 12:53:38 GMT, Cecil Moore <nospam@w5dxp.com>
wrote:

>Joey wrote:
>> Our vacation house has about 75 of plastic rain gutters on 3 sides of
>> the flat roof at about 20 feet up (2 story). I was thinking about
>> laying a 40m dipole in there with no connection to anything on the
>> house. The only question I have is, is that there is a 2" strip of
>> metal flashing about 8 inches above the gutter, for the length of it.
>> How bad do you think this would screw up a dipole that's essentially
>> parallel to it?
>
>It will act somewhat like guy wires which can cause
>distortion in the radiation pattern and losses.
>With any luck, it will have a high impedance and
>not have much effect. Try it and see what happens.
>Worst case, you may need to cut a slit every 1/4 WL
>to keep the currents low.

Thanks, I may just whip up a dipole and do that! Was also looking at
a RadioWavz Bazooka on 40m as well... dunno how that would compare
since it radiates differently... only one way to find out!

1339. Trouble with MFJ-269 and local AM broadcast station

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-08 22:16:12 UTC
From: "Bob D." <bobmgtd@insightbb.com>
Message-ID: <iu2dnSpX2o61gn7bnZ2dnUVZ_r2nnZ2d@insightbb.com>
Source record: 36457

I bought an MFJ-269 antenna analyzer with some 160 meter antenna design in mind. It works fine on my VHF and UHF antennas, but the local 1350 AM station (which is just a half mile away) interferes when an HF antenna is connected. The SWR reads >31 and the two analog meters dance to the station's audio. I tried a home made 1350 KHz notch filter I've used with a few receivers. The notch filter gets rid of the offending signal, but makes the 160 and 80 meter readings bad (verified with a dummy load).

Any solutions out there? Is it possible to build a 1350 KHz filter that won't throw off the impedance reading at 1800 KHz?

Luckily my Kenwood TS-570 is able to contend with the AM station.

--
Bob D. ND9B

1340. Re: Trouble with MFJ-269 and local AM broadcast station

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-08 22:29:40 UTC
From: Alan WA4SCA <APBIDDLE@UNITED.NET>
Message-ID: <b886e3ldoifont5hvj1eln7rama73sq2ug@4ax.com>
Source record: 36458

Bob,

MFJ makes something to do that, called the MFJ-731. I live near the WSM-AM tower, and definitely can "see" them when I do HF work. I am primarily a VHF-UHF operator, so I can't give you more than a cursory report. The MFJ-731 seems to take care of the problem without introducing significant inaccuracies.

--
Alan
WA4SCA

1341. Re: Dipole IN a rain gutter..

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 00:09:29 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99A6674CC17F5nonenowhere@61.9.191.5>
Source record: 36459

Joey <joey29034atyawwhodotcom> wrote in
news:vi26e3ptp110qqmo55v92nfs020au5n1c0@4ax.com:

> Thanks, I may just whip up a dipole and do that! Was also looking at
> a RadioWavz Bazooka on 40m as well... dunno how that would compare
> since it radiates differently... only one way to find out!
>

Wow, a miracle antenna. Their claims include:

Advantages:
* Broad bandwidth
* Almost unaffected by environment
* Positive gain with reference to a common dipole operating under the
same relative conditions up to 3.6 db
* Greatly attenuates harmonics(almost eliminates interference!!!
* Substantial decrease in static charge build-up
* Non-directional. (as a inverted V)
* Great for DX!!!

Can you believe that?

But wait, you wanted more: http://www.radiowavz.com/html/bazookas.htm .

My study of a typical Double Bazooka antenna system at
http://www.vk1od.net/DoubleBazooka/index.htm indicates that although it
might have slightly greater VSWR bandwidth (FWIW), it has more loss than
a conventional dipole.

Though it is likely to be poorer, I doubt you would notice it... but why
go to the trouble and expense for something that is likely to be poorer?

Owen

1342. Re: Dipole IN a rain gutter..

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 03:37:11 UTC
From: nm5k@wt.net
Message-ID: <1189309031.074490.106620@d55g2000hsg.googlegroups.com>
Source record: 36460

On Sep 8, 7:09 pm, Owen Duffy <n...@no.where> wrote:

>
> My study of a typical Double Bazooka antenna system
athttp://www.vk1od.net/DoubleBazooka/index.htmindicates that although it
> might have slightly greater VSWR bandwidth (FWIW), it has more loss than
> a conventional dipole.
>

I believe Walter Maxwell also wrote an article about that a few years
back.
There is no free lunch with the double bazookas. I don't use them
myself.
Not so much because of the slight extra loss, more that coax weighs
too much to use as antenna wire unless you have really strong
supports.
Regular wire is also a good bit cheaper. :/
MK

1343. Re: Dipole IN a rain gutter..

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 04:05:57 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99A68F63FC51Bnonenowhere@61.9.191.5>
Source record: 36461

ruprect@comcast.net wrote in
news:1189308665.978439.45750@w3g2000hsg.googlegroups.com:

> On Sep 8, 7:09 pm, Owen Duffy <n...@no.where> wrote:
> I believe Walter Maxwell also wrote an article about that a few years
> back.

Walt did indeed write on the Double Bazooka. Ch 18 of Reflections II is dedicated to the topic.

If I understand his discussion properly, Walt treats the coax stubs as pure reactances, ie lossless. My analysis treats them as lossy transmission lines, and the outcome will be different for that reason.

Further, my analysis treats the system as a system, and so captures the effects of feed line loss, so it is more complete.

My article also models the cross-connected Double Bazooka which is supposed by some to address the deficiencies of the Double Bazooka. The VSWR bandwidth is greater, but at the expense of even higher stub loss.

Owen

1344. W. Connecticut Hamfest is next Sunday

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 04:41:36 UTC
From: JimR <kd1yv6@notmyemail.com>
Message-ID: <15acr4-77a.ln1@oneyv.dyndns.org>
Source record: 36463

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c/o Joe deGroot, AB1DO,
30 Sunnyview Drive,
Redding, CT 06896

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Address:_____
City/State:_____

Please reserve _____ tables at $10.00 each.
Yes / No : I need electricity

Make checks payable to CARA

1345. Re: Trouble with MFJ-269 and local AM broadcast station

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 05:01:32 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <j7v6e3tnl5qfar0rnn7rih407c31jd9011@4ax.com>
Source record: 36462

On Sat, 8 Sep 2007 18:16:12 -0400, "Bob D." <bobmgtd@insightbb.com>
wrote:

>Any solutions out there? Is it possible to build a 1350 KHz filter that
>won't throw off the impedance reading at 1800 KHz?

Hi Bob,

Call the station, ask for the Engineer. Then ask when they go off the
air for testing. You may be up late into the wee hours, but for only
10 minutes or so.

If you are going to filter the AM out, you have to look through that
filter to see the antenna. Your experience has already borne out the
futility of that. However, I've seen just such advice in the past
with recommendations of charting things through a Smith Chart. I
can't say I have much confidence in that outcome - still, it may beat
out the alternative of waiting a month for the scheduled down time.
Even then, I would still get up that night and get the benchmark.

73's
Richard Clark, KB7QHC

1346. Re: Dipole IN a rain gutter..

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 05:23:38 UTC
From: Joey <joey29034atyawwhodotcom>
Message-ID: <lp07e3p5msggr9emohdk65deaib0lqruou@4ax.com>
Source record: 36464

sounds like a regular dipole will do the same for less :)
always interesting to see different designs and opinions tho!!

On Sat, 08 Sep 2007 20:37:11 -0700, nm5k@wt.net wrote:

>On Sep 8, 7:09 pm, Owen Duffy <n...@no.where> wrote:
>
>>
>> My study of a typical Double Bazooka antenna system
athttp://www.vk1od.net/DoubleBazooka/index.htmindicates that although it
>> might have slightly greater VSWR bandwidth (FWIW), it has more loss than
>> a conventional dipole.
>>
>
>
>I believe Walter Maxwell also wrote an article about that a few years
>back.
>There is no free lunch with the double bazookas. I don't use them
>myself.
>Not so much because of the slight extra loss, more that coax weighs
>too much to use as antenna wire unless you have really strong
>supports.
>Regular wire is also a good bit cheaper. :/
>MK

1347. Re: Dipole IN a rain gutter..

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 12:58:29 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <V5SEi.49537$Um6.47144@newssvr12.news.prodigy.net>
Source record: 36465

nm5k@wt.net wrote:
> I believe Walter Maxwell also wrote an article about that a few years
> back.

http://www.w2du.com/r2ch18.pdf
(Sec. 18.3 Resistive Losses)
--
73, Cecil http://www.w5dxp.com

1348. Re: Trouble with MFJ-269 and local AM broadcast station

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 13:00:52 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <r6r7e3p7tq6tgt4od50gnmgbbqpni9fntq@4ax.com>
Source record: 36466

On Sat, 8 Sep 2007 18:16:12 -0400, "Bob D." <bobmgtd@insightbb.com>
wrote:

>I bought an MFJ-269 antenna analyzer with some 160 meter antenna design in
>mind. It works fine on my VHF and UHF antennas, but the local 1350 AM
>station (which is just a half mile away) interferes when an HF antenna is
>connected. The SWR reads >31 and the two analog meters dance to the
>station's audio. I tried a home made 1350 KHz notch filter I've used with a
>few receivers. The notch filter gets rid of the offending signal, but makes
>the 160 and 80 meter readings bad (verified with a dummy load).
>
>Any solutions out there? Is it possible to build a 1350 KHz filter that
>won't throw off the impedance reading at 1800 KHz?
>
>Luckily my Kenwood TS-570 is able to contend with the AM station.

If you're open to getting another analyzer here's one to consider. I
have used my AIM 4160 at a friends location which is about ï¿½-mile from
a local broadcast station and it worked fine for 160-metrer antenna
adjustments -although the local BC station runs only 1 KW.

Here's a link showing what you can expect using the analyzer for your
situation.

http://w5big.com/AIM4170_SignalRejection.htm

Danny, K6MHE

1349. Re: Dipole IN a rain gutter..

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 13:04:02 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <2pr7e35evkdq8f5fanrsaig7713i97nul7@4ax.com>
Source record: 36467

On Sat, 08 Sep 2007 20:31:05 -0700, ruprect@comcast.net wrote:

>
>I believe Walter Maxwell also wrote an article about that a few years
>back.
>There is no free lunch with the double bazookas. I don't use them
>myself.
>Not so much because of the slight extra loss, more that coax weighs
>too much to use as antenna wire unless you have really strong
>supports.
>Regular wire is also a good bit cheaper. :/
>MK

Here's the article:

http://www.w2du.com/r2ch18.pdf

Danny, K6MHE

1350. Re: Trouble with MFJ-269 and local AM broadcast station

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 13:08:36 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1189343316.230372.136490@d55g2000hsg.googlegroups.com>
Source record: 36468

I have the BC filter for the MFJ259... Never could make heads or tails
of the so called 'instructions'...
I find that using EZNEC for getting initial element sizes and resonant
frequencies, then using a grid dip meter followed by a transmitter and
an RF current meter for final tuning has always worked for me...
I do use the MFJ259 quite a lot, but for my 80 and 160 arrays the
voltages from rectified BC getting into the analyzer often screws it
up... My best time is middle of the day when there is less propagation
of BC signals - usually that is when I am at the office, however
<sigh>...

denny / k8do

1351. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 13:12:08 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1189343528.758345.299290@y42g2000hsy.googlegroups.com>
Source record: 36469

>
> > Hi Denny,
>
> > Well, for such a melodramatic dip of your toe into this cesspool, I
> > hope you brought your snorkel.
>
> Or at least a fork and spoon...
>
> - 73 de Mike KB3EIA -

Yeah, there are rather large chunks floating in the effluent...

denny / k8do

1352. Re: requesting reception reports NDB beacon

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 14:15:54 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46e4000d$0$11065$4c368faf@roadrunner.com>
Source record: 36470

"The Shadow" <Cranston@CobaltClub.com> wrote in message
news:GmoEi.31452$L_7.22535@newsfe16.phx...
>
> "Roger (K8RI)" <validaddress@my.com> wrote in message
> news:3ru3e3phl2kqcfv0terrhq82e4nps2cam1@4ax.com...
>> On Thu, 06 Sep 2007 20:00:24 -0700, WA4SZE@gmail.com wrote:
>>
>>>Greetings:
>>>
>>>Requesting reception reports on our new NDB beacon LYQ on 529 KHZ
>>>just below the AM broadcast band.
>>
>> I thought most were being decomissioned?
>>
>> Roger (K8RI)
>
> Quite a few left
> See URL: http://www.airnav.com/navaids/
>
> Enter in several frequencies in the NDB range - approx 200 kHz to 535
> kHz
>
> Lamont

All the FAA ones are suppose to be gone by 2012, this has slipped from a
2010 date.
Seems the FAA is putting all their eggs in the GPS basket.

Jimmie

1353. Antenna for PCI wireless card

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 15:11:36 UTC
From: Henry <wa0goz@arrl.net>
Message-ID: <3K-dnX2LMKy8kHnbnZ2dnUVZ_v3inZ2d@comcast.com>
Source record: 36471

I am in need of a rubber ducky antenna for a PCI wireless card. It's the one with the reverse SMA connector.

If anyone on the list has an extra rubber ducky PCI wireless antenna with a R-SMA connector, please contact me off list and we can make arrangements for me to get it.

Thanks for the bandwidth.

Henry WA0GOZ

1354. Re: Trouble with MFJ-269 and local AM broadcast station

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 18:30:28 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <K4CdncVQqNkhpnnbnZ2dnUVZ_t-gnZ2d@comcast.com>
Source record: 36472

"Bob D." <bobmgtd@insightbb.com> wrote in message
news:iu2dnSpX2o61gn7bnZ2dnUVZ_r2nnZ2d@insightbb.com...
>I bought an MFJ-269 antenna analyzer with some 160 meter antenna design in
>mind. It works fine on my VHF and UHF antennas, but the local 1350 AM
>station (which is just a half mile away) interferes when an HF antenna is
>connected. The SWR reads >31 and the two analog meters dance to the
>station's audio. I tried a home made 1350 KHz notch filter I've used with a
>few receivers. The notch filter gets rid of the offending signal, but makes
>the 160 and 80 meter readings bad (verified with a dummy load).
>
> Any solutions out there? Is it possible to build a 1350 KHz filter that
> won't throw off the impedance reading at 1800 KHz?
>
> Luckily my Kenwood TS-570 is able to contend with the AM station.
>
> --
> Bob D. ND9B
>
MFJ sells a tunable band pass filter, which you would tune to 160 m. By the
way, a high pass filter won't work either. I built a 2 MHz high pass filter
to use on 75 m, but it affected all readings below about 5 MHz. My AM
stations aren't real close; so, the 269 works OK on 75 m during the middle
of the day.

Tam/WB2TT

1355. Re: Antenna for PCI wireless card

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 19:00:54 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <GpXEi.3836$d01.276@trnddc08>
Source record: 36473

"Henry" <wa0goz@arrl.net> wrote in message
news:3K-dnX2LMKy8kHnbnZ2dnUVZ_v3inZ2d@comcast.com...
>I am in need of a rubber ducky antenna for a PCI wireless card. It's the
>one with the reverse SMA connector.
>
> If anyone on the list has an extra rubber ducky PCI wireless antenna with
> a R-SMA connector, please contact me off list and we can make arrangements
> for me to get it.
>
> Thanks for the bandwidth.
>
> Henry WA0GOZ

Hi Henry

Since I already sent you a brand new antenna at no cost to you, I wonder
what your needs are for this collection of 2.4 GHz antennas.

Jerry

1356. Re: Antenna for PCI wireless card

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 21:37:06 UTC
From: Henry <wa0goz@arrl.net>
Message-ID: <sK6dnfhygl_m-nnbnZ2dnUVZ_vamnZ2d@comcast.com>
Source record: 36474

Jerry,

I have a PCI card without an antenna that I picked up at the Goodwill.
I was going to put it in my computer in my ham shack yesterday and
found I had lost the antenna you so graciously sent me. I couldn't
remember who sent it and for that I apologize. I put the card in
anyways and connected an antenna from a different computer and
everything works, so now I'm needing an antenna again.

I have turned this house up upside down and can't find it.

Henry

Jerry Martes wrote:

> "Henry" <wa0goz@arrl.net> wrote in message
> news:3K-dnX2LMKy8kHnbnZ2dnUVZ_v3inZ2d@comcast.com...
>
>>I am in need of a rubber ducky antenna for a PCI wireless card. It's the
>>one with the reverse SMA connector.
>>
>>If anyone on the list has an extra rubber ducky PCI wireless antenna with
>>a R-SMA connector, please contact me off list and we can make arrangements
>>for me to get it.
>>
>>Thanks for the bandwidth.
>>
>>Henry WA0GOZ
>
>
> Hi Henry
>
> Since I already sent you a brand new antenna at no cost to you, I wonder
> what your needs are for this collection of 2.4 GHz antennas.
>
> Jerry
>
>

1357. Re: Antenna for PCI wireless card

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 21:57:18 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <2%ZEi.3697$Ot1.1901@trnddc07>
Source record: 36475

"Henry" <wa0goz@arrl.net> wrote in message
news:sK6dnfhygI_m-nnbnZ2dnUVZ_vamnZ2d@comcast.com...
> Jerry,
>
> I have a PCI card without an antenna that I picked up at the Goodwill. I
> was going to put it in my computer in my ham shack yesterday and found I
> had lost the antenna you so graciously sent me. I couldn't remember who
> sent it and for that I apologize. I put the card in anyways and connected
> an antenna from a different computer and everything works, so now I'm
> needing an antenna again.
>
> I have turned this house up upside down and can't find it.
>
> Henry
>

Hi henry

I am a master at "not finding important things I save". But, I still have
two more antennas. I'll send you another. I have only two left so be
careful.
I still have your address. The antenna will be in the mail today.

Jerry

1358. Re: requesting reception reports NDB beacon

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 21:58:56 UTC
From: Tehrasha Darkon <darkon@netins.net>
Message-ID: <pan.2007.09.09.21.59.00@netins.net>
Source record: 36476

On Thu, 06 Sep 2007 20:00:24 -0700, WA4SZE wrote:

> Greetings:
>
> Requesting reception reports on our new NDB beacon LYQ on 529 KHZ just
> below the AM broadcast band.
>
>
> Can you hear it??? What is your QTH???? please post reports here!!

Despite lots of static crashes, and BC Band bleed through (though I could not find the BC station that matched the QRM I was receiveing) I was able to hear LYQ at approx 08:00 UTC, 40mi northwest of Cedar Rapids, Iowa.

Received with an Icom-706IIG and an 80M Carolina Windom.

Thats about 562 miles.

--Teh

1359. Re: Trouble with MFJ-269 and local AM broadcast station

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 22:40:27 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <nk$JEqVbZH5GFw9D@g3ohx.demon.co.uk>
Source record: 36477

In message <iu2dnSpX2o61gn7bnZ2dnUVZ_r2nnZ2d@insightbb.com>, Bob D.
<bobmgtd@insightbb.com> writes
>I bought an MFJ-269 antenna analyzer with some 160 meter antenna design in
>mind. It works fine on my VHF and UHF antennas, but the local 1350 AM
>station (which is just a half mile away) interferes when an HF antenna is
>connected. The SWR reads >31 and the two analog meters dance to the
>station's audio. I tried a home made 1350 KHz notch filter I've used with a
>few receivers. The notch filter gets rid of the offending signal, but makes
>the 160 and 80 meter readings bad (verified with a dummy load).
>
>Any solutions out there? Is it possible to build a 1350 KHz filter that
>won't throw off the impedance reading at 1800 KHz?
>
>Luckily my Kenwood TS-570 is able to contend with the AM station.
>

I've read some of the other replies, and some of them seem to suggest
unnecessary complexity in obtaining a solution.

First, what does your 1350kHz notch filter consist of? Let's assume it's
a simple series-resonant L/C to ground across the TS-570 RF input/output
(or somewhere across a 50 ohm coax transmission line between a
transmatch and the TS-570 RF input/output). If the L/C ratio is low
(smallish L, biggish C), the notch will be relatively broad, and
relatively deep. If the L/C ratio is high (biggish L, smallish C), the
suck will be relatively narrow, and not so deep (due to the additional
losses in the L). Either way, the notch may be broad enough to pull down
signals at 1800kHz.

At 1800kHz, the notch circuit will appear as an inductor across the
TS-570 input/output. If the reactance is not considerably more then 50
ohms (ie effectively an RF choke), you will lose signal level on
receive. On transmit, it will cause a poor SWR (looking out of the
TS-570). What you need to do is to sharpen up the notch on the LF side.
All you have to do is to parallel-tune the effective inductance of the
notch (at 1800kHz) by adding another capacitor across the trap (not just
across the L). You tune this capacitor so that, at 1800kHz, the trap
circuit appears a parallel-tuned circuit (infinite impedance) across the
TS-570 RF output/input. There should now be very little loss of signal
level, and a good SWR. Obviously, you may need to re-tune the capacitor
slightly as you QSY across the 160m band. On 80m, a much lower value of
capacitor will be needed.

Does this explanation seem to be applicable to your situation, or do you
have something different, which requires a different solution?

--
Ian

1360. Re: Trouble with MFJ-269 and local AM broadcast station

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-09 23:02:12 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13e8urq3fhsh330@corp.supernews.com>
Source record: 36478

One kind of filter you can use with antenna analyzers is a "half wave" filter. This is an LC ladder network which has the delay and impedance transformation properties of a half wavelength transmission line *at the design frequency*, so the load impedance appears at the filter input. It can be made with either a lowpass or highpass frequency response, with the attenuation beginning not far from the design frequency. While it's not by any means the sharpest cutoff filter you can build, it has respectable attenuation beyond the cutoff frequency. It will alter the impedance if you get very far from the design frequency, but for some bands you can probably get by with a single filter, provided that the impedance you're measuring isn't too far from the filter Z0 (see the next paragraph) -- you should check with known loads at the frequency extremes you want to measure. The cutoff might not be adequate for the 160 meter/1350 kHz problem at hand. You can cascade more than one for better attenuation, but then the frequency range limits become more restrictive and the filter construction more critical.

A "half wave" filter is made by cascading two "quarter wave" filters. A "quarter wave filter" is simply a pi network whose elements all have a reactance of Z0, where Z0 is the impedance of the transmission line which the network imitates. 50 ohms is of course the most commonly chosen value, but you'll get more extended frequency operation if you choose a Z0 which is fairly close to the impedance you're measuring. For a lowpass, use inductors for the series elements and capacitors for the shunt elements. For a highpass, use the opposite. When you cascade two "quarter wave" lowpass filters, you have a C-L-C-L-C (shunt-series-shunt-series-shunt) configuration, where the middle C is twice the value of the end Cs. A highpass looks like L-C-L-C-L, where the middle L is half the value of the end Ls.

The inductor Q has to be decent, but not spectacularly good. I use type 6 powdered iron cores for the HF range. Type 2 might be a little better for MF. Because of the low loaded Q, these filters are quite forgiving about construction and small value variations. Give one a try -- they're easy to build.

I live in a high-level RF environment, especially from TV transmitters. I use my antenna analyzer for a lot of different things -- just about everything except analyzing antennas, in fact, which ironically is the one thing it's most poorly suited for. When I really need to know an antenna's impedance (at least up to 60 MHz), out comes the GR bridge, with an old Icom R1 receiver as a tuned detector.

Roy Lewallen, W7EL

1361. Yagi in Proximity of Vertical/SNR problem..answers???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-10 01:16:28 UTC
From: mike <kyw1060@verizon.net>
Message-ID: <1189386988.542981.118620@o80g2000hse.googlegroups.com>
Source record: 36479

I am stump with this problem and I hope someone has a solution. I have a 4 Element Yagi and a vertical ground plane up each at 50' The ground plane is 40' away from the yagi to the North . The yagi is tuned correctly and properly built. I get this whitenoise at S-5 and can almost kill it with my ANC-4..(Yagi has both Vert/Horizonal with same SNR Problem) could the Ground plane due to its proximity create the white noise. in conjunction with the beam? I recall this problem a few years back with a Vertical on my house and the ground plane that is the same one 40' away except the white noise was only S-1...It looks very obvious there is some interaction. I just can not figure out what it is. Suggestions from those that may know. I will be lowering the Ground Plane that is 40' away from the house to see if that helps. All antennas are tuned for 10 meters...I am so confused..:) Thanks to all in advance Mike

1362. Wilson 500 rotor schematic

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-10 02:06:52 UTC
From: Fred@anonymous.org
Message-ID: <1189389800_5419@sp12lax.superfeed.net>
Source record: 36480

Does anyone have a the pinouts and / or wiring diagram for a wilson Model
500 Rotor
or the control box?

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http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
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1363. Re: Yagi in Proximity of Vertical/SNR problem..answers???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-10 02:09:41 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9499e3lgoe1jb9t58t993drjvorefuhje4@4ax.com>
Source record: 36481

On Sun, 09 Sep 2007 18:16:28 -0700, mike <kyw1060@verizon.net> wrote:

>could the Ground plane due to its proximity create the
>white noise. in conjunction with the beam?

Hi Mike,

Not normally. "Normally" means antennas do not, in and of themselves, originate or source any signals. Some might, but even more remote from "normal" is sourcing white noise. (Generally, an otherwise passive antenna might become a re-radiator due to corroded joints/connections. Even then, it requires an actual, active source to make your antenna do what it might be doing.)

>I recall this problem a few
>years back with a Vertical on my house and the ground plane that is
>the same one 40' away except the white noise was only S-1

Progressively higher noise over the years suggests weathering which further suggests corrosion (see above).

>...It looks
>very obvious there is some interaction.

"Obvious" to you, perhaps. You might want to explain why.

>I just can not figure out what
>it is. Suggestions from those that may know. I will be lowering the
>Ground Plane that is 40' away from the house to see if that helps. All
>antennas are tuned for 10 meters...I am so confused..:) Thanks to all
>in advance Mike

Keep your antenna up there. It is too slim a chance of being the culprit (at least until you explain what was "obvious"). You might also tell us what you mean by "white noise." Is this across the entire HF spectrum, across just the 10M band, or simply noise out of the speaker on your usual frequency?

73's
Richard Clark, KB7QHC

1364. Slinky dipole HF antenna recommendations wanted.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-10 02:51:54 UTC
From: RJG <spam@frontiernet.net>
Message-ID: <cjb9e3p0dtm9cqvl49qhu3df8us8m5m9mi@4ax.com>
Source record: 36482

I bought 2 Slinky's to put a Slinky antenna together, and would love to get comments and suggestions, (construction detail tips, care and feeding, etc.) from anyone who has tried this type of antenna before.

I live in a second floor apartment and have limited HF antenna options. I would love to hear recommendations for any other HF antenna designs that would work well in this type of setting.

Thanks.

1365. Re: Substitute wire in Trap?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-10 05:52:55 UTC
From: Clayton <Evans8119@aol.com>
Message-ID: <1189403575.586491.60240@w3g2000hsg.googlegroups.com>
Source record: 36483

Thanks for the replies everyone

Scott,
Could you please explain how I can use a grid dip meter to measure
the
resonant frequency and adjust the number of turns and/or wire spacing
to
get it where it needs to be?
I just picked up a grid dip meter but have never used one.

I'm not completely understanding the math required in figuring
inductance out...
I am able to figure out that with my coil form and number of turns the
coil I have is around 6.5uH but I cant figure out how to work wire
gauge into the equation? I have been trying to find someplace that
explains it but am unable to.
Could somebody here maybe explain how the math works when you throw
wire gauge into the equation?

Tam,
I am replacing the wire in the trap because when I was cleaning the
corrosion off,the last inch or so of the wire broke off and since the
wire is aluminum I figure I would be better off replacing it then
trying to repair.

Thanks for the help everyone
Its most Appreciated
Regards

1366. Re: Slinky dipole HF antenna recommendations wanted.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-10 06:47:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <6uo9e3h0nv6gk9d2imm4mmr6fudkn7ac9l@4ax.com>
Source record: 36385

On Sun, 09 Sep 2007 22:51:54 -0400, RJG <spam@frontiernet.net> wrote:

>I bought 2 Slinky's to put a Slinky antenna together, and would love to get
>comments and suggestions, (construction detail tips, care and feeding, etc.)
>from anyone who has tried this type of antenna before.
>
>I live in a second floor apartment and have limited HF antenna options. I
>would love to hear recommendations for any other HF antenna designs that
>would work well in this type of setting.

Classic wire-wound, air-cooled resistors.

You could do better with the various 1 meter diameter loops sold commercially. Some might suggest mobile screwdriver designs clamped to your balcony railing, but that isn't really the same sort of metal bulk equivalent to a, say, Chevy Suburban which would be the principal radiator. On a comparable price basis, the loops will be a better investment for 40M and up (I don't recall any that suggest they cover 80M and certainly 160M is beyond the realm).

A simple test for small (for their wavelength) antennas is to measure their bandwidth. We will take the Slinkies as an example (and certainly cheap enough to test this statement, and to see how they perform both). A small antenna that would be efficient will also exhibit a high Q. The loops mentioned, as I recall, generally exhibit 5 to 10KHz bandwidth. For the most part, they exhibit some of the better efficiencies (although not as high as a standard dipole).

The slinkies stand to have a wider bandwidth due to their loss (small wire AND steel wire). Initially, this may seem to be quite attractive, and if you ignore the loss, they may serve your purpose quite well (SWR and Loss are not always limitations to enjoying the hobby). As I said, cheap enough to simply plunge on and worry about efficiency later.

Tune-up can be as simple as stretching/compressing the coils until you achieve a match (at least that has been my experience). If the frequency is too low, add more slinkies. If you want to beef up the efficiency with a slinky, make it(them) part(s) of a center loaded element(s). Unfortunately that means more room than you have in your apartment situation.

73's
Richard Clark, KB7QHC

1367. Re: Yagi in Proximity of Vertical/SNR problem..answers???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-10 07:13:17 UTC
From: Jeff <jeff@local.host>
Message-ID: <46e4eec1$0$1347$834e42db@reader.greatnowhere.com>
Source record: 36386

">I am stump with this problem and I hope someone has a solution. I have
> a 4 Element Yagi and a vertical ground plane up each at 50' The ground
> plane is 40' away from the yagi to the North . The yagi is tuned
> correctly and properly built. I get this whitenoise at S-5 and can
> almost kill it with my ANC-4..

The second antenna will not be the cause of your problem.

The fact that you can kill the noise with the ANC 4 means that it is not "white noise". It must be some form of coherent interference that the beam is picking up. Is the problem worse in one particular direction?

What antenna are you using as a secondary one for the ANC4? That antenna must be seeing the noise as well for the ANC4 to be able to cancel it out.

Also you don't say what frequency the problem is on.

73
Jeff

1368. Yagi height above ground

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-10 13:51:56 UTC
From: amdx <amdx@knology.net>
Message-ID: <55e99$46e54c06$18d6b40c$14263@KNOLOGY.NET>
Source record: 36387

I see that height above ground affects the gain and the angle of the
main lobe. (actually all lobes) The info I've seen shows best gain and lobe
formation somewhere between 1/4 and 1-1/2 wavelengths above ground.
So I have a 2.4Ghz yagi, does that mean I should put it 1/4 to 1-1/2
wavelengths
above ground? That means it would be 1-1/2" to 6" above ground.
Mike

1369. Re: Yagi height above ground

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-10 17:04:38 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.09.10.17.04.37.826437@from.qrz.com>
Source record: 36388

On Mon, 10 Sep 2007 08:51:56 -0500, amdx wrote:

> I see that height above ground affects the gain and the angle of the
> main lobe. (actually all lobes) The info I've seen shows best gain and lobe
> formation somewhere between 1/4 and 1-1/2 wavelengths above ground.
> So I have a 2.4Ghz yagi, does that mean I should put it 1/4 to 1-1/2
> wavelengths
> above ground? That means it would be 1-1/2" to 6" above ground.

Good afternoon, Mike.

1/4 wavelength above ground seems might low to me in any case... it's only
16 feet on 20 meters.

I think that any such numbers you find, though, should be considered
minimums. Higher is generally better.

For example, 1-1/2 wavelengths at 20 meters is 100 feet. Now, that's
mighty effective height for a 20-meter beam, but I don't buy that it's
more nearly optimum than, say, 150 feet. I might believe that perhaps
once you get above 1-1/2 wavelengths at non-line-of-sight frequencies,
anything more may be an exercise in diminished returns.

As for your example at 2.4 GHz, don't forget that 2.4 GHz, like all UHF
and most VHF bands, is a line-of-sight band. You don't generally get skip
like you get on HF and low VHF. So, comparing, say, 14 MHz to 2.4 GHz in
terms of antenna performance vs height above ground isn't a valid
comparison.

1370. Re: Slinky dipole HF antenna recommendations wanted.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-10 17:07:33 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <uReFi.2174$Sd4.152@nlpi061.nbdc.sbc.com>
Source record: 36389

RJG wrote:
> I bought 2 Slinky's to put a Slinky antenna together, and would love to get
> comments and suggestions, (construction detail tips, care and feeding, etc.)
> from anyone who has tried this type of antenna before.

Maybe a better question would be: How many readers
know of anyone who has tried a Slinky antenna and
hasn't discarded it? IMO, one can always do better
than a Slinky dipole.
--
73, Cecil http://www.w5dxp.com

1371. Re: Yagi height above ground

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-10 17:12:10 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nttae3tlovgntjjsk8338d4rmaf057n9kf@4ax.com>
Source record: 36390

On Mon, 10 Sep 2007 08:51:56 -0500, "amdx" <amdx@knology.net> wrote:

>I see that height above ground affects the gain and the angle of the
>main lobe. (actually all lobes) The info I've seen shows best gain and lobe
>formation somewhere between 1/4 and 1-1/2 wavelengths above ground.
> So I have a 2.4Ghz yagi, does that mean I should put it 1/4 to 1-1/2
>wavelengths
>above ground? That means it would be 1-1/2" to 6" above ground.

Hi Mike,

All very true. However, the best gain aimed through your neighbor's
hubcaps isn't very useful.

Another point, at the frequency you are talking about, that "gain"
coming from the reflection from ground can be absolutely useless, or
worse, render a poor bit rate throughput (the appropriate topic thus
turns on the term "Fresnel Zone"). The principle mode of
communication is line-of-sight. In other words, you want both
antennas to be literally within "sight" of one another. For greater
range, you don't necessarily want more gain, you want more height.

More height gets you above the hubcaps and kneecaps of the world, and
out into blue sky where the sun, moon, and the stars are seen by
everyone. Very little power is required to transmit to the furthest
point on the terrestrial horizon. With an antenna mounted 100 feet
high, that is only 14 miles away and 100mW will give a clear signal
(at least at VHF). Adding more gain won't make that signal any
clearer, but you might want gain if the transmission power is in the
microwatts. Then you add elements.

Returning to the allusion to Fresnel Zones, this is where reflections
from the ground (which raises the "gain" you noticed) or nearby
buildings add out of phase and distort the bit shape of digital
transmissions. If your location is susceptible to such problems (and
forces a lot of retries in packets); then you want more "gain" in the
sense of actually achieving more selectivity. The antenna's added
elements react to these blurring reflections less, and focus on the
line-of-sight signal more.

73's
Richard Clark, KB7QHC

1372. Re: Substitute wire in Trap?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-10 21:18:17 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1189459097.660252.179850@22g2000hsm.googlegroups.com>
Source record: 36391

On Sep 9, 10:52 pm, Clayton <Evans8...@aol.com> wrote:
> Thanks for the replies everyone
>
> Scott,
> Could you please explain how I can use a grid dip meter to measure
> the
> resonant frequency and adjust the number of turns and/or wire spacing
> to
> get it where it needs to be?
> I just picked up a grid dip meter but have never used one.
>
> I'm not completely understanding the math required in figuring
> inductance out...
> I am able to figure out that with my coil form and number of turns the
> coil I have is around 6.5uH but I cant figure out how to work wire
> gauge into the equation? I have been trying to find someplace that
> explains it but am unable to.
> Could somebody here maybe explain how the math works when you throw
> wire gauge into the equation?
>
> Tam,
> I am replacing the wire in the trap because when I was cleaning the
> corrosion off,the last inch or so of the wire broke off and since the
> wire is aluminum I figure I would be better off replacing it then
> trying to repair.
>
> Thanks for the help everyone
> Its most Appreciated
> Regards

The link Owen put in his posting is to a pretty complete on-line inductance calculator. The one I use is similar, in that it uses a helical waveguide approach, though it probably does not include all the "tweaks" mentioned on the link page. Wire gauge plays a part in several ways. If the basic formula uses coil inside diameter, then note that larger wire puts the current further out, on average. If the wire spacing is much greater than the wire diameter, the current in the wire will be nearly radially symmetric: if you look at a cross-section of the wire, the current density will depend on the distance out from the center of the wire because of skin effect, but will not vary much at any angle for a given radius. But if the turns are closely spaced, proximity effect will re-distribute the current on the wire so it's no longer radially symmetric. That will affect the inductance.

A grid dip (or these days, just dip) meter is used to find resonances. You want the trap, when it's in the environment it's used in on the beam, to be parallel resonant so it presents a high impedance to signals at some frequency. So in a 20M-15M beam, an element with a trap resonant at 21MHz will look like a high impedance to 15M signals, and decouple the ends of the elements from the inner sections, which in turn are designed to operate on 15M. On 14MHz, the traps look inductive (the inductive reactance is lower and the capacitive reactance higher than at 21MHz, so the _parallel_ combination looks like a net inductance), and that means they look like loading coils. As a result, the elements on 20M including the outer sections and the traps-that-look-like-loading-coils are shorter than if they didn't include the traps. You can extend that reasoning to a tri-band beam.

You'd probably do well to practice with your dip meter with some resonant circuits "on the bench." You want to couple the meter to the coil of the resonant circuit to get a dip. To start, you can couple it closely, but the dip will be hard to read well, since the resonant circuit you're measuring and the one in the dip meter will interact strongly, "pulling" the dip frequency. So when you get a strong dip near a reasonable frequency, pull the dip meter further away, till you get just a gentle dip. Then the frequency readout (assuming the frequency scale on the meter is accurate) should be accurate. As with most instruments, it's good to get some experience with a dip meter so you have an idea when it's giving good readings and when it's in error.

Cheers,
Tom

Cheers,
Tom

1373. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-10 23:08:20 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fc4ipc$se8$1@news.albasani.net>
Source record: 36392

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

And, more:

http://www.targetwire.com/targetwire/2007/09/10/tw379/tw379_uk.html

Regards,
JS

1374. Re: Substitute wire in Trap?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-10 23:14:52 UTC
From: Ken Fowler <ko6no@yahoo.com>
Message-ID: <vaSdnfBMrPBzUnjbnZ2dnUVZ_q2hnZ2d@comcast.com>
Source record: 36393

On 10-Sep-2007, K7ITM <k7itm@msn.com> wrote:

> Path:
> border1.nntp.dca.giganews.com!nntp.giganews.com!postnews.google.com!22g2000hsm.googlegro
ups.com!not-for-mail
> From: K7ITM <k7itm@msn.com>
> Newsgroups: rec.radio.amateur.antenna
> Subject: Re: Substitute wire in Trap?
> Date: Mon, 10 Sep 2007 14:18:17 -0700
> Organization: http://groups.google.com
> Lines: 80
> Message-ID: <1189459097.660252.179850@22g2000hsm.googlegroups.com>
> References: <1189145814.099177.71200@r29g2000hsg.googlegroups.com>
> <w7ydnSYhQuTOfHzbnZ2dnUVZ_rignZ2d@comcast.com>
> <-p-dnX4AZb-FeHzbnZ2dnUVZ_hadnZ2d@comcast.com>
> <1189403575.586491.60240@w3g2000hsg.googlegroups.com>
> NNTP-Posting-Host: 192.25.240.225
> Mime-Version: 1.0
> Content-Type: text/plain; charset="us-ascii"
> X-Trace: posting.google.com 1189459097 27818 127.0.0.1 (10 Sep 2007 21:18:17 GMT)
> X-Complaints-To: groups-abuse@google.com
> NNTP-Posting-Date: Mon, 10 Sep 2007 21:18:17 +0000 (UTC)
> In-Reply-To: <1189403575.586491.60240@w3g2000hsg.googlegroups.com>
> User-Agent: G2/1.0
> X-HTTP-UserAgent: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.8.1.6)
Gecko/20070725
> Firefox/2.0.0.6,gzip(gfe),gzip(gfe)
> Complaints-To: groups-abuse@google.com
> Injection-Info: 22g2000hsm.googlegroups.com; posting-host=192.25.240.225;
> posting-account=ps2QrAMAAAA6_jCuRt2JEIpn5Otqf_w0
> Bytes: 5076
> Xref: number1.nntp.dca.giganews.com rec.radio.amateur.antenna:285513
>
> On Sep 9, 10:52 pm, Clayton <Evans8...@aol.com> wrote:
> > Thanks for the replies everyone
> >
> > Scott,
> > Could you please explain how I can use a grid dip meter to measure
> > the
> > resonant frequency and adjust the number of turns and/or wire spacing
> > to
> > get it where it needs to be?
> > I just picked up a grid dip meter but have never used one.
> >

....
Its most Appreciated
> > Regards
>
....

> You'd probably do well to practice with your dip meter with some
> resonant circuits "on the bench." You want to couple the meter to the
> coil of the resonant circuit to get a dip. To start, you can couple
> it closely, but the dip will be hard to read well, since the resonant
> circuit you're measuring and the one in the dip meter will interact
> strongly, "pulling" the dip frequency. So when you get a strong dip
> near a reasonable frequency, pull the dip meter further away, till you
> get just a gentle dip. Then the frequency readout (assuming the
> frequency scale on the meter is accurate) should be accurate. As with
> most instruments, it's good to get some experience with a dip meter so
> you have an idea when it's giving good readings and when it's in
> error.
>
> Cheers,
> Tom
>
>
> Cheers,
> Tom

The dials on Dip Meters are usually not very precise and may be inaccurate while loaded by the
circuit under test. You can improve your frequency determination by listening to the dip meter
signal on an accurate receiver or with a frequency counter coupled to the coil.

Ken Fowler, KO6NO

1375. Re: Yagi height above ground

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-11 01:01:16 UTC
From: amdx <amdx@knology.net>
Message-ID: <e9038$46e5e8db$18d6b40c$26409@KNOLOGY.NET>
Source record: 36394

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:nttae3tlovgntjjsk8338d4rmaf057n9kf@4ax.com...
> On Mon, 10 Sep 2007 08:51:56 -0500, "amdx" <amdx@knology.net> wrote:
>
>>I see that height above ground affects the gain and the angle of the
>>main lobe. (actually all lobes) The info I've seen shows best gain and
>>lobe
>>formation somewhere between 1/4 and 1-1/2 wavelengths above ground.
>> So I have a 2.4Ghz yagi, does that mean I should put it 1/4 to 1-1/2
>>wavelengths
>>above ground? That means it would be 1-1/2" to 6" above ground.
>
>
> Hi Mike,
>
> All very true. However, the best gain aimed through your neighbor's
> hubcaps isn't very useful.
>
> Another point, at the frequency you are talking about, that "gain"
> coming from the reflection from ground can be absolutely useless, or
> worse, render a poor bit rate throughput (the appropriate topic thus
> turns on the term "Fresnel Zone"). The principle mode of
> communication is line-of-sight. In other words, you want both
> antennas to be literally within "sight" of one another. For greater
> range, you don't necessarily want more gain, you want more height.
>
> More height gets you above the hubcaps and kneecaps of the world, and
> out into blue sky where the sun, moon, and the stars are seen by
> everyone. Very little power is required to transmit to the furthest
> point on the terrestrial horizon. With an antenna mounted 100 feet
> high, that is only 14 miles away and 100mW will give a clear signal
> (at least at VHF). Adding more gain won't make that signal any
> clearer, but you might want gain if the transmission power is in the
> microwatts. Then you add elements.
>
> Returning to the allusion to Fresnel Zones, this is where reflections
> from the ground (which raises the "gain" you noticed) or nearby
> buildings add out of phase and distort the bit shape of digital
> transmissions. If your location is susceptible to such problems (and
> forces a lot of retries in packets); then you want more "gain" in the
> sense of actually achieving more selectivity. The antenna's added
> elements react to these blurring reflections less, and focus on the
> line-of-sight signal more.
>

> 73's
> Richard Clark, KB7QHC

Thanks for the reply,
So, I need to get it off the ground, or in my case the boat.
I'm mounting it onto the aluminum roof of a boat.
How many wavelengths above ground (roof) would be considered Free Space?

Regarding transmission power: it's not microwatts but it is 18 milliwatts.

Fresnel Zone; I didn't really understand the why, but jist of it is, an
object
can be outside the line of site, but be in what is called the Fresnel Zone
and this object will attenuate the signal.

Thanks, Mike

1376. Re: Yagi height above ground

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-11 06:45:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <iadce3pkcogf2999btrod5e5fti3lloa0p@4ax.com>
Source record: 36395

On Mon, 10 Sep 2007 20:01:16 -0500, "amdx" <amdx@knology.net> wrote:

>How many wavelengths above ground (roof) would be considered Free Space?

Hi Mike,

I'm not sure that is very important in the scope of practicality. More about what can go wrong below.

>Regarding transmission power: it's not microwatts but it is 18 milliwatts.

Sufficient for a lot of applications. Given you are on a boat, you have your limitations. I don't suppose the horizon is more than 10 miles away if it is a sail boat with a tall mast. To another, similarly equipped boat, you can roughly double your range. Standing on the deck of a small boat, you probably can only see out to 3 or 4 miles.

>Fresnel Zone; I didn't really understand the why, but jist of it is, an
>object
>can be outside the line of site, but be in what is called the Fresnel Zone
>and this object will attenuate the signal.

No.

Fresnel also goes by the name "picket fencing." This means that reflections from nearby objects, and the direct signal cancel each other. There are dead zones for reception. Shift things a half wave (not very far for the band we are talking about) and they add constructively. There are also intermediate zones which for digital transmission can be problematic. For mobile operations like VHF in a car, the signal from a fixed source will alternately fade and build as though you are listening through a picket fence rushing past the window. A choppy water can really create a witch's brew of wave mixing (no pun intended).

Here, the solution is a gain antenna that is focused (aimed) at the source giving it a stovepipe view, so to speak. This cuts down on all reflections contributions and you do this not for the gain, but for the directivity (which is euphemistically called gain). However, a highly directive antenna, up high on a boat, in the same chop, will bob and weave and runs the risk of that stovepipe view looking somewhere other than at the source. Mixed bag.

73's
Richard Clark, KB7QHC

1377. Re: Slinky dipole HF antenna recommendations wanted.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-11 06:54:14 UTC
From: Paul <null@null.null>
Message-ID: <46e63b65$0$14123$742ec2ed@news.sonic.net>
Source record: 36396

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:uReFi.2174$Sd4.152@nlpi061.nbdc.sbc.com...
> RJG wrote:
>> I bought 2 Slinky's to put a Slinky antenna together, and would love to
>> get
>> comments and suggestions, (construction detail tips, care and feeding,
>> etc.)
>> from anyone who has tried this type of antenna before.
>
> Maybe a better question would be: How many readers
> know of anyone who has tried a Slinky antenna and
> hasn't discarded it? IMO, one can always do better
> than a Slinky dipole.

Perhaps, but I put one together about 30 years ago, hung it on the apartment wall (inside), and made lots of contacts with it. I just stretched it or compressed it until the SWR was reasonable. I recall that the tuning was indeed pretty broad, so I suppose that there was more loss than you might see with a more conductive wire -- or it could have been due to the effects of the adjacent wood and plaster. Actually, I may not have had an SWR meter, but instead tuned the output tank of my Heath Apache for peak and dip. I miss that boat-anchor.

Still, it was small, and it worked well enough to get me on the air. I think I used two slinkys soldered together for each leg of the dipole, and stretched them out to about 15 feet. I operated on 40 meters. There are better small antennas, but sometimes "good enough is perfect".

-Paul, wb6cxc

1378. Re: Yagi height above ground

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-11 07:39:21 UTC
From: Jeff <jeff@local.host>
Message-ID: <46e64656$0$1346$834e42db@reader.greatnowhere.com>
Source record: 36397

>I see that height above ground affects the gain and the angle of the
> main lobe. (actually all lobes) The info I've seen shows best gain and
> lobe
> formation somewhere between 1/4 and 1-1/2 wavelengths above ground.

This information is not really relevant to your situation. The best beam formation is in free space, but at HF this is not practical, the antenna is nearly always too close to the ground for the ground effects to be neglected.
However at 2.4GHz you can get many wavelengths above the ground, and practically the answer is higher the better. Ideally you should achieve line of sight between stations, and also be sufficiently high so that intervening ground does not encroach into what are known as the Fresnel Zones (the low vale ones at least).

Regards
Jeff

> So I have a 2.4Ghz yagi, does that mean I should put it 1/4 to 1-1/2
> wavelengths
> above ground? That means it would be 1-1/2" to 6" above ground.
> Mike
>

1379. Re: Yagi height above ground

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-11 11:30:55 UTC
From: amdx <amdx@knology.net>
Message-ID: <9df92$46e67c67$18d6b40c$3495@KNOLOGY.NET>
Source record: 36398

>>Fresnel Zone; I didn't really understand the why, but jist of it is, an
>>object
>>can be outside the line of site, but be in what is called the Fresnel Zone
>>and this object will attenuate the signal.
>
> No.
>
> Fresnel also goes by the name "picket fencing." This means that
> reflections from nearby objects, and the direct signal cancel each
> other. There are dead zones for reception. Shift things a half wave
> (not very far for the band we are talking about) and they add
> constructively. There are also intermediate zones which for digital
> transmission can be problematic. For mobile operations like VHF in a
> car, the signal from a fixed source will alternately fade and build as
> though you are listening through a picket fence rushing past the
> window. A choppy water can really create a witch's brew of wave
> mixing (no pun intended).
>
> Here, the solution is a gain antenna that is focused (aimed) at the
> source giving it a stovepipe view, so to speak. This cuts down on all
> reflections contributions and you do this not for the gain, but for
> the directivity (which is euphemistically called gain). However, a
> highly directive antenna, up high on a boat, in the same chop, will
> bob and weave and runs the risk of that stovepipe view looking
> somewhere other than at the source. Mixed bag.
>
Thanks, Richard,
I found additional explanation of Fresnal Zone at
http://www.zytrax.com/tech/wireless/fresnel.htm
Mike

1380. NATO, too... Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-11 11:53:35 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <3lvFi.15827$ya1.11478@news02.roc.ny>
Source record: 36399

http://ftp.rta.nato.int/public/PubFullText/RTO/TR/RTO-TR-IST-050/$$TR-IST-050-ALL.pdf

"Increase of the existing HF noise floor by widespread use of PLT (BPL is called Power Line Telecommunications (PLT) in Europe)...will bring up problems for Military Radio Users as well as for HF Communication Intelligence (COMINT) in all NATO countries. The signal-to-noise ratio thus may be reduced for tactical and strategic HF radio as well as for fixed sensitive COMINT sites."

So not only is BPL a bad idea for amateur radio and shortwave broadcast, it helps the terrorists! But hey, at least someone on our side makes a profit (well, maybe).

1381. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-11 14:25:46 UTC
From: richardharrison@webtv.net
Message-ID: <26187-46E6A56A-966@storefull-3252.bay.webtv.net>
Source record: 36400

John Smith wrote:
"The photon/wave properties of rf still remains a mystery ... and proof is hard to come by."

Osama, Obama, and Chelsea`s mama are real, alive and on TV. The particle theory of light, like the myth that Elvis lives, should only be accepted to the level that gives us comfort. We don`t need light particles to calculate antenna dimensions.

Best regards, Richard Harrison, KB5WZI

1382. Re: NATO, too... Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-11 16:31:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fc6fsf$tl0$1@news.albasani.net>
Source record: 36401

gwatts wrote:

> ...
> So not only is BPL a bad idea for amateur radio and shortwave broadcast,
> it helps the terrorists! But hey, at least someone on our side makes a
> profit (well, maybe).

I believe it is quite certain, BPL is going forward. Everything is
over, except the crying ...

I strongly suspect any problems can be worked out on the fly. We are in
for the ride.

Regards,
JS

1383. Re: Slinky dipole HF antenna recommendations wanted.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-11 19:19:17 UTC
From: charlie <wehatespam@wymsey.co.uk>
Message-ID: <65adnZWxRZizd3vbnZ2dnUVZ8t-nnZ2d@pipex.net>
Source record: 36402

RJG wrote:
> I bought 2 Slinky's to put a Slinky antenna together, and would love to get
> comments and suggestions, (construction detail tips, care and feeding, etc.)
> from anyone who has tried this type of antenna before.
>
> I live in a second floor apartment and have limited HF antenna options. I
> would love to hear recommendations for any other HF antenna designs that
> would work well in this type of setting.
>
> Thanks.
>

If like me you live in an apartment and cannot erect external
antennas but do have access to a loft (or have a very small garden)
then a slinky may well enable you to put out a signal on one of the
LF bands. In my case I wanted to able to work the UK and into Europe
on the 80m band.

You see what I did at http://www.radiowymsey.org/FanDipole/slinky.htm

Of course it's a compromise and an 80m dipole would be much better
but it will work and you will get a signal out.

Charlie.

--
M0WYM
www.radiowymsey.org

1384. Re: Slinky dipole HF antenna recommendations wanted.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-11 19:22:52 UTC
From: charlie <wehatespam@wymsey.co.uk>
Message-ID: <V6mdnYn0qouYdnvbnZ2dnUVZ8v2vnZ2d@pipex.net>
Source record: 36403

charlie wrote:

Also, take a look at the fan dipole at
http://www.radiowymsey.org/FanDipole/fandiploe.htm , this antenna
gets me out on all bands from 40m to 6m and I have worked the US,
Canada and North Africa from Southern England (10w SSB).

Charlie.

--
M0WYM
www.radiowymsey.org

1385. Re: requesting reception reports NDB beacon

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 01:51:04 UTC
From: w4eal@yahoo.com
Message-ID: <1189561864.787830.72110@57g2000hsv.googlegroups.com>
Source record: 36404

On Sep 6, 11:00 pm, WA4...@gmail.com wrote:
> Greetings:
>
> Requesting reception reports on our new NDB beacon LYQ on 529 KHZ
> just below the AM broadcast band.
>
> Can you hear it??? What is your QTH???? please post reports
> here!!
>
> We tried a shunt fed tower some weeks back and gave up on it due to
> poor beacon range.
>
> We are now using a 130 feet high flat top antenna with a horizontal
> run of 250 feet between two 140 feet high towers.
>
> The flat top antenna has a Vertical wire 130 feet high connected dead
> center to a cable that is suspended and insulated from the two
> support towers.
>
> This antenna is an 'traditional' NDB beacon antenna
> cpy ur sig on 528.98kc/s variable fading 0245z . IC-706mk2g, maxxcom 200' @ 30' diple. FB
de w4eal 135 mi e nashville, 1288' amsl

> Driving in my car with the car radio tuned to 530 khz I can hear the
> beacon loud and clear for 40 miles!!
>
> When we used the shunt fed tower tuned to a VSWR of 1.1 to 1 the
> range at best was
> 15 miles
>
> Using the same ground radials
>
> we are located about 50 miles south of Nashville,TN just off of
> I-24 Manchester,TN
>
> Thanks for the reports!!!!

1386. Re: Slinky dipole HF antenna recommendations wanted.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 02:14:05 UTC
From: Steve <sdaniel13@speakeasy.net>
Message-ID: <1189563245.966333.116320@o80g2000hse.googlegroups.com>
Source record: 36405

On Sep 10, 2:47 am, Richard Clark <kb7...@comcast.net> wrote:
> On Sun, 09 Sep 2007 22:51:54 -0400, RJG <s...@frontiernet.net> wrote:
> >I bought 2 Slinky's to put a Slinky antenna together, and would love to get
> >comments and suggestions, (construction detail tips, care and feeding, etc.)
> >from anyone who has tried this type of antenna before.
>
> >I live in a second floor apartment and have limited HF antenna options. I
> >would love to hear recommendations for any other HF antenna designs that
> >would work well in this type of setting.
>
> Classic wire-wound, air-cooled resistors.
>
> You could do better with the various 1 meter diameter loops sold
> commercially. Some might suggest mobile screwdriver designs clamped
> to your balcony railing, but that isn't really the same sort of metal
> bulk equivalent to a, say, Chevy Suburban which would be the principal
> radiator. On a comparable price basis, the loops will be a better
> investment for 40M and up (I don't recall any that suggest they cover
> 80M and certainly 160M is beyond the realm).
>
> A simple test for small (for their wavelength) antennas is to measure
> their bandwidth. We will take the Slinkies as an example (and
> certainly cheap enough to test this statement, and to see how they
> perform both). A small antenna that would be efficient will also
> exhibit a high Q. The loops mentioned, as I recall, generally exhibit
> 5 to 10KHz bandwidth. For the most part, they exhibit some of the
> better efficiencies (although not as high as a standard dipole).
>
> The slinkies stand to have a wider bandwidth due to their loss (small
> wire AND steel wire). Initially, this may seem to be quite
> attractive, and if you ignore the loss, they may serve your purpose
> quite well (SWR and Loss are not always limitations to enjoying the
> hobby). As I said, cheap enough to simply plunge on and worry about
> efficiency later.
>
> Tune-up can be as simple as stretching/compressing the coils until you
> achieve a match (at least that has been my experience). If the
> frequency is too low, add more slinkies. If you want to beef up the
> efficiency with a slinky, make it(them) part(s) of a center loaded
> element(s). Unfortunately that means more room than you have in your
> apartment situation.
>
> 73's
> Richard Clark, KB7QHC

Speaking of loops, does anyone have experience with any of these:

http://www.universal-radio.com/catalog/hamants/4465.html

1387. Re: Slinky dipole HF antenna recommendations wanted.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 04:25:51 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46e76a47$0$15378$4c368faf@roadrunner.com>
Source record: 36406

"charlie" <wehatespam@wymsey.co.uk> wrote in message
news:65adnZWxRZizd3vbnZ2dnUVZ8t-nnZ2d@pipex.net...
> RJG wrote:
>> I bought 2 Slinky's to put a Slinky antenna together, and would love to
>> get
>> comments and suggestions, (construction detail tips, care and feeding,
>> etc.)
>> from anyone who has tried this type of antenna before.
>>
>> I live in a second floor apartment and have limited HF antenna options. I
>> would love to hear recommendations for any other HF antenna designs that
>> would work well in this type of setting.
>>
>> Thanks.
>>
>
> If like me you live in an apartment and cannot erect external
> antennas but do have access to a loft (or have a very small garden)
> then a slinky may well enable you to put out a signal on one of the
> LF bands. In my case I wanted to able to work the UK and into Europe
> on the 80m band.
>
> You see what I did at http://www.radiowymsey.org/FanDipole/slinky.htm
>
> Of course it's a compromise and an 80m dipole would be much better
> but it will work and you will get a signal out.
>
>
>
> Charlie.
>
>
> --
> M0WYM
> www.radiowymsey.org

The Slinky was a pretty popular antenna when I was in the air force back in
the 70s. On the weekends you could run a coax out the dorm window and put up
a tem antenna in the trees. Weekends got to lok like field days for a while.

Jimmie

1388. Update Re: "Extension" antenna ?in?sanity check, please?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 10:15:57 UTC
From: Don Bruder <dakidd@sonic.net>
Message-ID: <46e7bc5d$0$14120$742ec2ed@news.sonic.net>
Source record: 36407

As some may recall, about a month ago, I asked about the feasibility of running 802.11 down a hunk of cable TV coax. The responses showed me that was a "major unlikely". To put it mildly.

I'm happy to say that despite that avenue not working out, functionality has been achieved.

(Warning: Here comes "Don goes into advocate mode" verbiage. The rest of this post may sound like an ad. It's just a happy customer.)

With a D-Link "ANT24-0700" antenna. Was going to build a cantenna, but I was in Staples for paper, and when I walked through the wireless section, I spotted this unit. Figured "What the heck - I'll hold on to the receipt", and dragged it home. The package copy claims it to be a "7dBi Omnidirectional High-Gain indoor antenna".

Yeah... OK... Package copy is nice, but I'm not interested in that alone. I want results.

Unpack it. Nice and simple - cut the ears off the plastic and take it out. It's in two pieces - a heavy (with nice little rubber "button" feet) magnetic base unit that's more of a three-pointed star than a triangle (and has provisions for, and comes with a "kit" for wall-mounting) The second piece is a "rubber ducky on steroids" antenna whip - Real close to a foot long, with an RP-SMA connector to thread onto the base, and a hinge, just like the machine's original-equipment ducky. A (package claim - I didn't bother to measure) 1.5 meter RG-178 cable connects it to an RP-SMA connector that screws directly onto my card. (No need for the SMA-TNC adapter that came in the package with it - use the adapter, and I've found that you can screw it onto a Linksys router, though) Set up, it looks pretty much like an overgrown, standalone version of the original equipment "rubber ducky" antenna.

And it sucks in the signal. In spades. Swapping from the card's original duck to this thing took me from a display showing "no networks detected" to a "signal strength is off the chart" connection to the target Linksys wireless router before I had a chance to look back to the screen after screwing it on.

The advice is to put it on the router, but... <shrug> According to "the rules" I can't do anything with the router anyway, and it's working just fine attached to the remote machine, so I'm happy enough with it. Betcha if I hung one of these things on the router itself, the signal strength would be as good as (maybe better than) having a wired connection.

Color me "tickled pink".

<end "Don does endorsement" mode>

--
Don Bruder - dakidd@sonic.net - If your "From:" address isn't on my whitelist,
or the subject of the message doesn't contain the exact text "PopperAndShadow"
somewhere, any message sent to this address will go in the garbage without my
ever knowing it arrived. Sorry... <http://www.sonic.net/~dakidd> for more info

1389. MCMASTER RESEARCHER VERIFIES NEW TYPE OF RADIO WAVE

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 16:05:34 UTC
From: Danny Richardson <n_group@k6mhe.com>
Message-ID: <2g3ge3pnqek9hjav7hlp9cdptluib7dds0@4ax.com>
Source record: 36408

Here we go again.

http://download.antennex.com/listarch/media/news.pdf

1390. Testing of RF switching unit

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 16:22:25 UTC
From: David <nospam@nospam>
Message-ID: <ZumdncMIUu7aj3XbnZ2dnUVZ8sylnZ2d@bt.com>
Source record: 36409

I have a RF switching unit that multiplexes 4 input RF ports to 12 output ports. The unit carries RF of a frequency range from DC to 1 GHz. It carries GPS signals and other RF from an antenna.

Can you advise me of the design of a test jig to accurately test this unit? The test jig will contain a Network Analyser.

Where I have a split path or differential measurement, do I always have to use phase matched and batch matched cables?

Does my test jig switch calibration loads between ports? The cal load being an open, a short and a load.

Do I get the paths the same by using phase matched & batch matched cables, and then do a vector gen to save a 'footprint' of the test jig when it is in a known good
state?

How do I minimise errors introduced by imperfections in the test jig? I am looking for the test jig to measure the absolute SWR and insertion loss of the RF switching unit, using S parameters.

1391. Re: Has anybody ever???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 18:27:23 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1189621643.499338.50180@o80g2000hse.googlegroups.com>
Source record: 36410

merlin-7 wrote:
> > >
> > >> Keep in mind that while driving in a convoy it is not a good idea to
> have
> > >> to use antenna A-B switches etc...I would much rather just turn on the
> rig I
> > >> need and off the one I do not need at the time.
> > >
> > > Use two relays. Each relay opens the RF path to each antenna when
> > > unpowered. Then energize each relay (appropriately) when a rig is
> > > turned on. These can be cheap relays because they are either always
> > > on or always off (according to the state of either rig).
> > >
> > > NOW, if you emphasized us to read this section, and then slip us a
> > > mickey that you "might" need to monitor the other band you are not
> > > working, then shame on you.
> > >
> > > 73's
> > > Richard Clark, KB7QHC
> >
> >
> > --------------
> >
> >
> > Or split the difference between the two bands when you trim the antenna
> > for lowest SWR. Then turn the power back in both rigs (wink - dang,
> > something flew into my eye) to around 5 watts (if you have a 100 watt
> > rig) and don't worry about the SWR. Not enough heat being developed at 5
> > watts and a high SWR to damage anything if the rig is rated for 100
> > watts into an SWR of 1.5:1 (or thereabouts) or lower. You don't need no
> > esteenkin' switches or relays.
> >
> > Of course, "I" wouldn't do anything like this. Too much too lose.
> >
> > Ed, NM2K
>
> The 11 meter rig is A cobra 29 limited classic...It is stock. I have no
> need or wish to modify it as the only time I use it is to talk to truckers,
> going in the opposite direction. (I dry out buildings for a living and it's
> nice to know what roads are open and the last place to get fuel when going
> into an area hit by a hurricane)
>
> The 10 meter rig is an old rat-shack HTX-10 ...25 watts.
>

> The cobra does have some kind of a manual tuner in it. I have no idea how
> well it could match an antenna cut for say 28.8 MHZ. I would think not very
> well.
>
> I have no problem with the 11 meter side having a high swr as long as it
> does not damage the rig. Also, the 11 meter rig has a little red light that
> comes on if the antenna is mismatched and I am not sure if the rig cuts the
> output power in that situation.
>
> I guess I could always have 2 whips. One cut for 11 and one cut for 10 and
> change them when needed but I was trying to avoid that..

I know of someone running both 10 and 11M from one radio. He took a
block of steel and mached holes in it to mount two antennas on one
side and a ball mount on the other. The holes for the antennas were
about 6 inches apart anf the ball mount was half way in between on the
opposite side. The 10M antenna was cut for the high end of 10M and the
11M antenna wass cut for the low end of 11M. Antennas were full length
1/4 wl whips. OF COURSE you would never run both 11 and 10 from the
same radio.

Jimmie

1392. Re: Testing of RF switching unit

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 18:30:07 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1189621807.823983.211660@w3g2000hsg.googlegroups.com>
Source record: 36411

On Sep 12, 9:22 am, "David" <nospam@nospam> wrote:
> I have a RF switching unit that multiplexes 4 input RF ports to 12 output
> ports. The unit carries RF of a frequency range from DC to 1 GHz. It carries
> GPS signals and other RF from an antenna.
>
> Can you advise me of the design of a test jig to accurately test this unit?
> The test jig will contain a Network Analyser.
>
> Where I have a split path or differential measurement, do I always have to
> use phase matched and batch matched cables?
>
> Does my test jig switch calibration loads between ports? The cal load being
> an open, a short and a load.
>
> Do I get the paths the same by using phase matched & batch matched cables,
> and then do a vector gen to save a 'footprint' of the test jig when it is in
> a known good
> state?
>
> How do I minimise errors introduced by imperfections in the test jig? I am
> looking for the test jig to measure the absolute SWR and insertion loss of
> the RF switching unit, using S parameters.

Modern vector network analyzers will provide for calibration at the ends of cables, even if the cables go through relays or splitters or whatever. The the cables (plus other components) introduce error only to the extent that they are not perfectly constant and that they introduce loss which decreases the signal-to-noise of the measurement. Vector network analyzers commonly can do a full two-port measurement in one setup; that is, they have the ability to measure transmission and return loss in both directions, and that may save on the number of setups required.

You didn't directly mention a desire to measure isolation. You didn't mention if you want the tests to be fully automated, or run through operator intervention: three possible scenarios are that an operator connects a pair of cables from the VAN to certain ports on the DUT and adds some terminations, runs a test, changes the setup, runs another test, ...; an operator connects a complete set of cables from a test jig which includes loads and path-switching relays and then initiates the test sequence; or some machinery connects the DUT to the test jig and runs the tests. In the first case, the "test jig" is very simple--in the other two, it's considerably more complicated. You didn't mention the accuracy you need to achieve. I'm a little puzzled by the "DC to 1GHz" and the "GPS signals," in that GPS RF signals are in the

range above 1GHz.

We do testing of a somewhat similar nature here, using RF relays to switch the test configuration for different tests. It's important to calibrate such a system, and you need to establish how often the calibration should happen. Because of the number of ports involved, your calibration may be a bit tedious, so it could be an advantage to insure that you use especially stable cables and other components so the calibration doesn't have to be done too often. It's also important to do a careful error analysis so you understand the source of the errors and their expected magnitudes. At first look, I'm not seeing that you need matched cables in your system, but you do need to calibrate the net effect of the cables and whatever switching you use, and account for the variability as cables are flexed and as relays close with slightly different contact resistances each time. It's possible that your accounting will tell you that those variabilities are so far below your allowed tolerances as to be unimportant, but you should think about them in any event.

You'll probably find it worthwhile to carefully document your thinking about the design of the test system, so that if anyone asks in the future you can show them just what went into the design.

Cheers,
Tom

1393. G5RV & Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 19:04:06 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <KKWFi.115362$dI1.98604@newsfe08.phx>
Source record: 36412

A friend bought a G5RV Lite and has a Kenwood TS-480SAT, hoping the ATU in the Kenwood would be able to tune all bands.
But only two bands would tune - 6m and 10m.

He then borrowed a G5RV Jr. Same results.

So question is does G5RV's in general require an external tuner with a wider matching range than the typical internal ATU's in late model rigs??

The Shadow usually knows. (;-)

1394. Re: Has anybody ever???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 19:45:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fc9fl7$9oj$1@news.albasani.net>
Source record: 36413

JIMMIE wrote:
> ...
OF COURSE you would never run both 11 and 10 from the
> same radio.
>
>
> Jimmie
>

When I am on the road and 10 meters is not turning up a contact, I,
quite frequently, run the knob to Chicken Bander channel 17, 19, or 21.
<evil chicken-bander-grin>

Regards,
JS

1395. Re: Wilson 500 rotor schematic

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 19:50:12 UTC
From: Norm VE3CZI <ve3czi@arrl.net>
Message-ID: <8qXFi.173$372.139@read2.cgocable.net>
Source record: 36414

Fred:
I have information for you...BUT your ISP refuses to accept your address ? ?
Norm

<Fred@anonymous.org> wrote in message
news:1189389800_5419@sp12lax.superfeed.net...
> Does anyone have a the pinouts and / or wiring diagram for a wilson Model
> 500 Rotor
> or the control box?
>
> -----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet
> News==----
> http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+
> Newsgroups
> ----= East and West-Coast Server Farms - Total Privacy via Encryption
> =----

1396. Re: G5RV & Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 20:16:48 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <LOXFi.43708$7e6.22394@bignews4.bellsouth.net>
Source record: 36415

"The Shadow" <Cranston@CobaltClub.com> wrote in message
news:KKWFi.115362$dI1.98604@newsfe08.phx...
>A friend bought a G5RV Lite and has a Kenwood TS-480SAT, hoping the ATU in
>the Kenwood would be able to tune all bands.
> But only two bands would tune - 6m and 10m.
>
> He then borrowed a G5RV Jr. Same results.
>
> So question is does G5RV's in general require an external tuner with a
> wider matching range than the typical internal ATU's in late model rigs??
>
> The Shadow usually knows. (;-)

The shadow would probably suggest you to try changing the feedline length a
bit to 'see what happens'.
I love the g5rv - especially on 20 m

1397. Re: G5RV & Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 20:31:34 UTC
From: nm5k@wt.net
Message-ID: <1189629094.026511.21790@57g2000hsv.googlegroups.com>
Source record: 36416

On Sep 12, 2:04 pm, "The Shadow" <Crans...@CobaltClub.com> wrote:

>
> So question is does G5RV's in general require an external tuner with a wider
> matching range than the typical internal ATU's in late model rigs??
>
> The Shadow usually knows. (;-)

Yes. Most tuners in radios are not much more than glorified
"line flatteners". They were never intended to match antenna
systems per say. They are intended to use with antennas that
are tuned, or in the "ballpark" so to speak.
The main purpose of the tuner is to provide a wider usable
bandwidth for the radios finals when using existing antennas.
IE: say you had a dipole that covered 3.7 to 3.9 mhz.
The tuner will let you run say 3.55 and keep the radio happy.
And the losses with such a setup are still fairly low.
The tuners were never intended to run "all band" antennas
where the Z can be from very low to very high.
For that, you really need a outboard tuner made for that job.
And if you go that far, might as well ditch all the G5RV
"junk" and just run ladder line all the way from the tuner
and the antenna.
You could tune the feedline to get a decent match, but
then you have to rig the same for all the other bands..
IE: the Cecil method..
MK

1398. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 22:14:47 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns99A99B1BB6959doldridgsprintca@64.59.135.159>
Source record: 36417

richardharrison@webtv.net (Richard Harrison) wrote in news:26187-46E6A56A-966@storefull-3252.bay.webtv.net:

> John Smith wrote:
> "The photon/wave properties of rf still remains a mystery ... and proof
> is hard to come by."
>
> Osama, Obama, and Chelsea`s mama are real, alive and on TV. The particle
> theory of light, like the myth that Elvis lives, should only be accepted
> to the level that gives us comfort. We don`t need light particles to
> calculate antenna dimensions.

Quite so. And there is no "vs." here. Just two different ways of looking at the same physical phenomena.

--
Dave Oldridge+
ICQ 1800667

1399. Re: Slinky dipole HF antenna recommendations wanted.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 22:20:43 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns99A99C1D96A94doldridgsprintca@64.59.135.159>
Source record: 36418

Richard Clark <kb7qhc@comcast.net> wrote in
news:6uo9e3h0nv6gk9d2imm4mmr6fudkn7ac9l@4ax.com:

> On Sun, 09 Sep 2007 22:51:54 -0400, RJG <spam@frontiernet.net> wrote:
>
>>I bought 2 Slinky's to put a Slinky antenna together, and would love
>>to get comments and suggestions, (construction detail tips, care and
>>feeding, etc.) from anyone who has tried this type of antenna before.
>>
>>I live in a second floor apartment and have limited HF antenna
>>options. I would love to hear recommendations for any other HF antenna
>>designs that would work well in this type of setting.
>
> Classic wire-wound, air-cooled resistors.
>
> You could do better with the various 1 meter diameter loops sold
> commercially. Some might suggest mobile screwdriver designs clamped
> to your balcony railing, but that isn't really the same sort of metal
> bulk equivalent to a, say, Chevy Suburban which would be the principal
> radiator. On a comparable price basis, the loops will be a better
> investment for 40M and up (I don't recall any that suggest they cover
> 80M and certainly 160M is beyond the realm).

I made a 160m loop out of LMR400, using the capacitance of the inner-to-
outer conductor to resonate it. Made it two turns and wound a gimmick
match out of flat 4-wire phone cable onto it to fire it up. Very narrow,
but reasonably effective. Better than a hamstick, I think. It's about 3
feet in diameter.

My normal 80-10 meter set-up is a hamstick horzontally off the balcony
rail. The rail backs onto a stucco wall with underlying mesh, so the
"ground" although tilted sideways is vastly larger than the average car.
I'm going to try a screwdriver there because I like the idea of being
able to change bands from the operating position instead of needing to go
outside in whatever weather is happening at the moment.

> A simple test for small (for their wavelength) antennas is to measure
> their bandwidth. We will take the Slinkies as an example (and
> certainly cheap enough to test this statement, and to see how they
> perform both). A small antenna that would be efficient will also
> exhibit a high Q. The loops mentioned, as I recall, generally exhibit
> 5 to 10KHz bandwidth. For the most part, they exhibit some of the
> better efficiencies (although not as high as a standard dipole).

Yes, my 160m loop is almost too narrow for SSB.

--
Dave Oldridge+
ICQ 1800667

1400. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 22:52:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fc9qjd$17s$1@news.albasani.net>
Source record: 36419

Dave Oldridge wrote:

> ...
> Quite so. And there is no "vs." here. Just two different ways of looking
> at the same physical phenomena.
>
>

Yeah, exactly, and LDE is just a figment of the imagination!

And, all the antennas possible have already been built, etc. ...

:-)

Regards,
JS

1401. Re: Slinky dipole HF antenna recommendations wanted.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 23:17:34 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <90rge39tfnjbgmcj9kiklrhdhihhcv59nh@4ax.com>
Source record: 36420

On Wed, 12 Sep 2007 22:20:43 GMT, Dave Oldridge
<doldridg@leavethisoutshaw.ca> wrote:

>I made a 160m loop out of LMR400, using the capacitance of the inner-to-
>outer conductor to resonate it. Made it two turns and wound a gimmick
>match out of flat 4-wire phone cable onto it to fire it up. Very narrow,
>but reasonably effective. Better than a hamstick, I think. It's about 3
>feet in diameter.

...

>Yes, my 160m loop is almost too narrow for SSB.

Hi Dave,

Radiation resistance for a 1 meter loop at 1800 KHz is 23 microOhms.
If I were to interpret your BW to be 2 KHz (an antenna Q of 900); then
the Ohmic resistance would be 0.0225 Ohms (0.002 Ohms/foot). This
resistance is on par with #13 wire which has considerably less surface
area than the LMR400.

The added resistance resides, undoubtedly, in connections (or maybe
the gimmick); and if you drove it out, you might find your loop
suitably more efficient for CW-only. Unfortunately, it might become
an arc-gap transmitter.

As an aside, I can't visualize the gimmick's relation to the
inner/outer conductors. You have any close-up pictures?

73's
Richard Clark, KB7QHC

1402. Re: G5RV & Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-12 23:32:02 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <kD_Fi.58107$t9.33410@bignews7.bellsouth.net>
Source record: 36421

<nm5k@wt.net> wrote in message
news:1189629094.026511.21790@57g2000hsv.googlegroups.com...
> On Sep 12, 2:04 pm, "The Shadow" <Crans...@CobaltClub.com> wrote:
>
>>
>> So question is does G5RV's in general require an external tuner with a
>> wider
>> matching range than the typical internal ATU's in late model rigs??
>>
>> The Shadow usually knows. (;-)
>
> Yes. Most tuners in radios are not much more than glorified
> "line flatteners". They were never intended to match antenna
> systems per say. They are intended to use with antennas that
> are tuned, or in the "ballpark" so to speak.
> The main purpose of the tuner is to provide a wider usable
> bandwidth for the radios finals when using existing antennas.
> IE: say you had a dipole that covered 3.7 to 3.9 mhz.
> The tuner will let you run say 3.55 and keep the radio happy.
> And the losses with such a setup are still fairly low.
> The tuners were never intended to run "all band" antennas
> where the Z can be from very low to very high.
> For that, you really need a outboard tuner made for that job.
> And if you go that far, might as well ditch all the G5RV
> "junk" and just run ladder line all the way from the tuner
> and the antenna.
> You could tune the feedline to get a decent match, but
> then you have to rig the same for all the other bands..
> IE: the Cecil method..
> MK
>
>

I have, quite serendipitously, found a radio with a built-in auto tuner that will match my Van Gordon All Bander with its twinlead feedline and a 4:1 balun. So far, I haven't discovered anywhere that it won't tune, but I don't use 160 meters...

The rig is the Yaesu FT-890AT from ten or fifteen years ago. I was blown away after trying it just for a lark and finding it operable everyone I chose to operate.

Ed, NM2K

1403. Re: Testing of RF switching unit

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-13 00:00:56 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fc9ujo$o4d$1@news.jpl.nasa.gov>
Source record: 36422

K7ITM wrote:
> On Sep 12, 9:22 am, "David" <nospam@nospam> wrote:
>
>>I have a RF switching unit that multiplexes 4 input RF ports to 12 output
>>ports. The unit carries RF of a frequency range from DC to 1 GHz. It carries
>>GPS signals and other RF from an antenna.

GPS is >1GHz.. 1.2 to 1.5 or thereabouts

>>
>>Can you advise me of the design of a test jig to accurately test this unit?
>>The test jig will contain a Network Analyser.
FWIW:
Rhode+Schwartz, Agilent, Anritsu and others would be happy to tell you
how to do it (when you spend $100K on the core of the measurement
system, the field application engineers are more than willing to spend a
few hours or days figuring out how to make your measurements)

Does your test jig have to make all the measurments "hands off"? or is
reconfiguration of the test port cables between measurements ok?

If the former, you need a 16 port measurement system with a suitable
relay box.

>>
>>Where I have a split path or differential measurement, do I always have to
>>use phase matched and batch matched cables?

In theory, you'll be able to calibrate out all the various port
configurations. If you're using one of the newer PNAs, this is pretty
straightforward with an automated script. You'll connect your cal
standards to the ports you need, configure your test jig relays, run the
cal, store the cal configuration, go on to the next.

Then, when making the measurements on the UUT, you just do something
along the lines of:
For each measurement
Configure test jig
Load Cal set corresponding to configuration
Make Measurement
Save data
repeat

>>
>>Does my test jig switch calibration loads between ports? The cal load being
>>an open, a short and a load.

It can. This is sort of like what an "E-Cal" box does. You'll do a
one-time calibration of your cal stuff. What kind of performance do you
need?

>>
>>Do I get the paths the same by using phase matched & batch matched cables,
>>and then do a vector gen to save a 'footprint' of the test jig when it is in
>>a known good
>>state?
>>
Sort of.. there's a bit more to it, but essentially that's what's done.
For a full bidirectional two port measurement, there's potentially 16
calibration terms for each frequency.

>>How do I minimise errors introduced by imperfections in the test jig? I am
>>looking for the test jig to measure the absolute SWR and insertion loss of
>>the RF switching unit, using S parameters.

To what precision do you need to know these things. 20dB return loss is
a heck of a lot easier than 50dB. 0.1dB insertion loss is harder than
1dB. What sort of isolation do you have between ports of the UUT and do
you need to measure it. (i.e. is the isolation good enough that you just
need to check it, and after that, you can ignore the ports that aren't
connected, or do you have to do a full N-port characterization)

>
> We do testing of a somewhat similar nature here, using RF relays to
> switch the test configuration for different tests. It's important to
> calibrate such a system, and you need to establish how often the
> calibration should happen. Because of the number of ports involved,
> your calibration may be a bit tedious, so it could be an advantage to
> insure that you use especially stable cables and other components so
> the calibration doesn't have to be done too often. It's also
> important to do a careful error analysis so you understand the source
> of the errors and their expected magnitudes. At first look, I'm not
> seeing that you need matched cables in your system, but you do need to
> calibrate the net effect of the cables and whatever switching you use,
> and account for the variability as cables are flexed and as relays
> close with slightly different contact resistances each time. It's
> possible that your accounting will tell you that those variabilities
> are so far below your allowed tolerances as to be unimportant, but you
> should think about them in any event.

The uncertainty analysis is going to drive your system design.

1404. Re: G5RV & Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-13 01:19:20 UTC
From: Brian Kelly <kelly@dvol.com>
Message-ID: <1189646360.088677.273030@d55g2000hsg.googlegroups.com>
Source record: 36423

On Sep 12, 3:04 pm, "The Shadow" <Crans...@CobaltClub.com> wrote:
> A friend bought a G5RV Lite and has a Kenwood TS-480SAT, hoping the ATU in
> the Kenwood would be able to tune all bands.
> But only two bands would tune - 6m and 10m.
>
> He then borrowed a G5RV Jr. Same results.
>
> So question is does G5RV's in general require an external tuner with a wider
> matching range than the typical internal ATU's in late model rigs??
>
> The Shadow usually knows. (;-)

Sir Cranston: One answer to your question is "it depends". It depends on the radio and it's ATU. My old TS-940S(AT) autotuner successfully handled several Field Day G5RVs which had gawdawful high SWRs on most bands.

The direct answer to your question is that according to it's published Kenwood specs the autotuner in the TS-840SAT can't handle SWRs above 3:1 which immediately precludes it's ability to match G5RVs on most bands. As Mark put it it's a "line flattener", not a real antenna tuner. Annoying marketing gimmick.

My FT-847 doesn't have an ATU which is OK with me because I use an external LDG AT-11MP ATU which I'm convinced will match almost *any* antenna to the radio. Did a proper job of matching couple more recently used G5RVs. The MP is out of production and has been by replaced by the even better AT-100Pro. A couple hunded bucks well spent.

http://www.ldgelectronics.com/index.php

Brian w3rv

1405. Re: G5RV & Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-13 02:41:35 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <zr1Gi.4614$FO2.2632@newssvr14.news.prodigy.net>
Source record: 36424

The Shadow wrote:
> So question is does G5RV's in general require an external tuner with a
> wider matching range than the typical internal ATU's in late model rigs??

Yes
--
73, Cecil http://www.w5dxp.com

1406. Re: Slinky dipole HF antenna recommendations wanted.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-13 04:00:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13ehdep2dr6ji03@corp.supernews.com>
Source record: 36425

A Slinky dipole is an excellent illustration of the fact that we use a lot more power than we need to. As some folks have pointed out, most of the power you send to it ends up as heat. As others have noted, you can still talk to lots of stations with it. If everybody would use one, it would drop the QRM level a lot.

Roy Lewallen, W7EL

1407. Re: G5RV & Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-13 08:54:07 UTC
From: Tom K3MOV <tomk3mov@yahoo.com>
Message-ID: <1189673647.101639.33980@k79g2000hse.googlegroups.com>
Source record: 36426

On Sep 12, 3:04 pm, "The Shadow" <Crans...@CobaltClub.com> wrote:
> A friend bought a G5RV Lite and has a Kenwood TS-480SAT, hoping the ATU in
> the Kenwood would be able to tune all bands.
> But only two bands would tune - 6m and 10m.
>
> He then borrowed a G5RV Jr. Same results.
>
> So question is does G5RV's in general require an external tuner with a wider
> matching range than the typical internal ATU's in late model rigs??
>
> The Shadow usually knows. (;-)

FWIW, I have an ICOM Pro II, an Ameritron ALS 600 and a Palstar AT-
AUTO Tuner feeding a True Talk 102' G5RV. Just for the heck of it, I
took the amp and Palstar out of line. The Pro II tuner tuned all bands
from 80 to 6 with no problem. You might want to consider adding 6' or
12' of coax to the transmission line. Sometime that will do the
trick. GL es 73, Tom K3MOV

1408. Re: Slinky dipole HF antenna recommendations wanted.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-13 09:03:01 UTC
From: Tom K3MOV <tomk3mov@yahoo.com>
Message-ID: <1189674181.880832.245720@50g2000hsm.googlegroups.com>
Source record: 36427

On Sep 9, 10:51 pm, RJG <s...@frontiernet.net> wrote:
> I bought 2 Slinky's to put a Slinky antenna together, and would love to get
> comments and suggestions, (construction detail tips, care and feeding, etc.)
> from anyone who has tried this type of antenna before.
>
> I live in a second floor apartment and have limited HF antenna options. I
> would love to hear recommendations for any other HF antenna designs that
> would work well in this type of setting.
>
> Thanks.

Here is the eHam Review site (http://www.eham.net/reviews/detail/1077)
for commercial Slinky Antennas. As you can see, they seem to work for
some folks. Here's the site for the manufacturer (http://
www.usa2way.homestead.com/CliffDweller.html). 73 & GL, Tom K3MOV

1409. Re: G5RV & Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-13 20:58:09 UTC
From: nm5k@wt.net
Message-ID: <1189717089.426197.277680@22g2000hsm.googlegroups.com>
Source record: 36428

On Sep 12, 8:19 pm, Brian Kelly <ke...@dvol.com> wrote:

>
> Sir Cranston: One answer to your question is "it depends". It depends
> on the radio and it's ATU. My old TS-940S(AT) autotuner successfully
> handled several Field Day G5RVs which had gawdawful high SWRs on most
> bands.

Some radio tuners will tune many loads..
But... I'd be kinda paranoid to use it as such if the
loads are far off the 50 ohm path. In some cases
the tuners can run real hot in those cases, and
I'd be afraid to whack it out.. Not a cheap fix for most
of those built in tuners.
But thats just me.. If anyone else feels lucky, have at it.
Myself, I never buy the built in radio tuners. I'd rather
have one outboard if I needed one. In most all cases,
my antennas are ready to go as is..
IE: all my home/portable antennas are resonant/tuned,
and my mobile is already matched by it's own devices.
So for me, I rarely would need a inboard tuner.
I'm still using a IC-706mk2g for most of my radio play.
No tuner in it.. Ditto for my old TS-830.. Course, the
830 will match a pretty wide spread just with it's
loading control. A 3:1 match is no sweat to it most
of the time..
MK

1410. Re: Photon vs Wave emissions from antennas?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-14 03:43:37 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fcd01a$k74$1@news.albasani.net>
Source record: 36429

John Smith wrote:

> ...
> And, no, this motor doesn't come apart at this speed--the metal the
> motor is made of came from the UFO crash in Roswell NM ;-)
>
> Regards,
> JS

OK. So now you are all setting there with a big fat carrier right around
1 Mhz, and peering out yer windows.

However, and by the way, the answer was I was charged with creating a
disturbance in the gravitational ether ... just in case you were
wondering :)

But, 'ya already knew that! :)

Regards,
JS

1411. Re: Slinky dipole HF antenna recommendations wanted.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-14 09:49:11 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns99AB1CB3DF750doldridgsprintca@64.59.135.159>
Source record: 36430

Richard Clark <kb7qhc@comcast.net> wrote in
news:90rge39tfnjbgmcj9kiklrhdhihhcv59nh@4ax.com:

> On Wed, 12 Sep 2007 22:20:43 GMT, Dave Oldridge
> <doldridg@leavethisoutshaw.ca> wrote:
>
>>I made a 160m loop out of LMR400, using the capacitance of the
>>inner-to- outer conductor to resonate it. Made it two turns and wound
>>a gimmick match out of flat 4-wire phone cable onto it to fire it up.
>>Very narrow, but reasonably effective. Better than a hamstick, I
>>think. It's about 3 feet in diameter.
>
> ...
>
>>Yes, my 160m loop is almost too narrow for SSB.
>
> Hi Dave,
>
> Radiation resistance for a 1 meter loop at 1800 KHz is 23 microOhms.

Two turns makes it 92 micro-ohms.

> If I were to interpret your BW to be 2 KHz (an antenna Q of 900); then
> the Ohmic resistance would be 0.0225 Ohms (0.002 Ohms/foot). This
> resistance is on par with #13 wire which has considerably less surface
> area than the LMR400.

I'm not sure it is as wide as 2khz. LIS, it's not really suitable for
SSB. It's OK on CW, though.

> The added resistance resides, undoubtedly, in connections (or maybe
> the gimmick); and if you drove it out, you might find your loop
> suitably more efficient for CW-only. Unfortunately, it might become
> an arc-gap transmitter.

I'd not recommend it for low power.

> As an aside, I can't visualize the gimmick's relation to the
> inner/outer conductors. You have any close-up pictures?

Look at Ted Hart's loop design in the old Antenna books. I sort of
patterned it after that. The 80 meter 1-turn loop is a bit bigger and,
of course works a bit better. Don't get me wrong, these were test-of-
concept antennas and I don't use them for my working antennas. If I were
to build a working loop for 80m, I'd do it out of 2-inch copper pipe and
make it as large as practical.

--
Dave Oldridge+
ICQ 1800667

1412. Understanding Yagi antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-14 21:17:42 UTC
From: amdx <amdx@knology.net>
Message-ID: <c5c3c$46eafa66$18d6b40c$17868@KNOLOGY.NET>
Source record: 36431
Cross-posted to: rec.radio.amateur.antenna,alt.internet.wireless

I've posted a picture on >alt.binaires.schematics.electronic<
to an effort to help me get a better understanding of an antenna.
It is a 2.4Ghz antenna about 18" long
The driven element is a copper ribbon 0.2" wide by 0.032" thick.
The copper ribbon forms a loop about 2" wide by 0.625" tall.
The gap in the ribbon would be 0.020", but note; in the pictures
a moon shaped piece has been cut from both ends. I think this
moon cut effectively make the gap look larger.
The total coax length is 2.350", the shield a bit shorter at 2.08".
There are 4 toroids on the coax. These are under a piece of heat
shrink, so I have no idea what material they would be.
All element spacings are all equal and element lengths are within
.030" of each other. I think they were designed to be the same but
manufacturing tolerances made the differences. The reflector is longer.
So now what can the group tell me about;
Driven element impedance
the gap
coax length impedance transformation
the 4 toroids
Thanks for the help, if you need any other details let me know.
Mike

1413. RE:Polyurathane or similar

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-14 23:30:51 UTC
From: HH <harryharms@hotmail.com>
Message-ID: <LQEGi.942$9r.900@news-server.bigpond.net.au>
Source record: 36432

Could anyone help me on what is the best spray/brush on sealer to use on my vertical antenna resonator?

I have home brewed the 80m resonator for an elderly Hygain AV-18VS, but need to weatherproof it.

Is clear polyurethane from the paint shop OK to use?

Is there another more suitable commercially available sealant?

I would appreciate any help or knowledge please.
John
VKKCE

1414. 10 meter antenna and radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-15 00:18:27 UTC
From: Denno <powerwashguy@aol.com>
Message-ID: <1189815507.253313.324210@19g2000hsx.googlegroups.com>
Source record: 36433

Hi All. I will be getting my General Class license in the very near future I hope. Of course, they got rid of CW after I finally had 5 WPM mastered. :-)

I live in New England and a friend of mine lives about 300 air miles away. He has a 100 foot tower and it's amazing to see him work 20 meters. He also mentioned that he is finding 10 meters is opening more and is having luck there also.

Unfortunately, all I have access to at this time is a 25 watt 10 meter rig. For my first HF antenna, I would like to be able to communicate with my HAM friend as a priority, with any further contacts a bonus. He recommended a full wavelength dipole set up as an inverted V and experiment with wire angles. I know the inverted V is much more omni directional than a flat dipole.

So the antennas I have considered which I hope have the proper take off angles are:
Inverted V
Moxon Beam
10 meter extended double Zepp (low radiation angle?)
10 meter vertical loop (experiment with loop angle and feedpoints)
Some type of sloper (dipole, end-fed, delta loop type?)

I'm hoping someone out there has had some luck with medium range consistency (300 miles in my case) at 10 meters. I have a fairly large yard but it is heavily wooded. The ground ranges from rich loom to solid granite. A 44' EDZ is possible but definitely won't be easy, although I will certainly make the effort. I also have a 10 meter yagi sitting in pieces but if you think that may work, I will have to suspend it from trees in a fixed direction.

Thanks!

1415. Re: 10 meter antenna and radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-15 00:30:28 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <XdadnQWzVOA4unbbnZ2dnUVZ_qKgnZ2d@bright.net>
Source record: 36335

Been quite a while since I've been on 10M, but I think 300 miles might
be a little tough. Too far for groundwave and I think a little too
close for E skip. Heck though, give it a try!

Denno wrote:
> Hi All. I will be getting my General Class license in the very near
> future I hope. Of course, they got rid of CW after I finally had 5
> WPM mastered. :-)
>
> I live in New England and a friend of mine lives about 300 air miles
> away. He has a 100 foot tower and it's amazing to see him work 20
> meters. He also mentioned that he is finding 10 meters is opening more
> and is having luck there also.
>
> Unfortunately, all I have access to at this time is a 25 watt 10
> meter rig. For my first HF antenna, I would like to be able to
> communicate with my HAM friend as a priority, with any further
> contacts a bonus. He recommended a full wavelength dipole set up as
> an inverted V and experiment with wire angles. I know the inverted V
> is much more omni directional than a flat dipole.
>
> So the antennas I have considered which I hope have the proper take
> off angles are:
> Inverted V
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>
> I'm hoping someone out there has had some luck with medium range
> consistency (300 miles in my case) at 10 meters. I have a fairly
> large yard but it is heavily wooded. The ground ranges from rich loom
> to solid granite. A 44' EDZ is possible but definitely won't be easy,
> although I will certainly make the effort. I also have a 10 meter
> yagi sitting in pieces but if you think that may work, I will have to
> suspend it from trees in a fixed direction.
>
> Thanks!
>

--
Scott
http://corbenflyer.tripod.com/
Gotta Fly or Gonna Die
Building RV-4 (Super Slow Build Version)

1416. Coaxial cable ExtraFlex 9096IIA ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-15 00:47:38 UTC
From: ddufault@sympatico.ca
Message-ID: <1189817258.789879.121950@o80g2000hse.googlegroups.com>
Source record: 36336

Hi,
I need a low-loss flexible coaxial cable. Radio Works
(www.radioworks.com) sells the following model, which seems to fit my
needs:

ExtraFlex 9096-IIA (a flexible version of LMR400)

Did anyone try this coaxial cable? Are the specs as good as announced
on their web site? What are your comments?

1417. Re: 10 meter antenna and radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-15 01:01:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fcfau0$8pt$1@news.albasani.net>
Source record: 36337

Scott wrote:
> Been quite a while since I've been on 10M, but I think 300 miles might
> be a little tough. Too far for groundwave and I think a little too
> close for E skip. Heck though, give it a try!
> ...

Yep. Too close for local, too far for skywave. But hey, ya never know.

Solar activity is way down, it isn't like the 70's ...

Regards,
JS

1418. Re: Coaxial cable ExtraFlex 9096IIA ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-15 02:10:17 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13emfo75qnii2ab@corp.supernews.com>
Source record: 36338

<ddufault@sympatico.ca> wrote in message
news:1189817258.789879.121950@o80g2000hse.googlegroups.com...
> Hi,
> I need a low-loss flexible coaxial cable. Radio Works
> (www.radioworks.com) sells the following model, which seems to fit my
> needs:
>
> ExtraFlex 9096-IIA (a flexible version of LMR400)
>
> Did anyone try this coaxial cable? Are the specs as good as announced
> on their web site? What are your comments?
>

This is similar to the Davis Bury Flex. I have not used the 9096 but have used the Bury Flex. Measured at 440 mhz it seems to meet the db loss specifications. Measured 4 pieces about 100 feet long and got the same results. Just under a 3 db loss including the connectors.

http://www.davisrf.com/ham1/coax.htm#buryflex

1419. Re: 10 meter antenna and radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-15 02:18:10 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13emg6vcebodjee@corp.supernews.com>
Source record: 36339

"Denno" <powerwashguy@aol.com> wrote in message
news:1189815507.253313.324210@19g2000hsx.googlegroups.com...
> Hi All. I will be getting my General Class license in the very near
> future I hope. Of course, they got rid of CW after I finally had 5
> WPM mastered. :-)
>
> I live in New England and a friend of mine lives about 300 air miles
> away. He has a 100 foot tower and it's amazing to see him work 20
> meters. He also mentioned that he is finding 10 meters is opening more
> and is having luck there also.
>
> Unfortunately, all I have access to at this time is a 25 watt 10
> meter rig. For my first HF antenna, I would like to be able to
> communicate with my HAM friend as a priority, with any further
> contacts a bonus. He recommended a full wavelength dipole set up as
> an inverted V and experiment with wire angles. I know the inverted V
> is much more omni directional than a flat dipole.
>

You will have to trade that 10 meter rig for something that will work 80
meters or 40 meters. While the band may open sometime for that distance,
it is too far away for ground wave and maybe too close for sky wave most of
the time. No antenna that can be put up by most hams can help you reach
that distance 99.9 % of the time on 10 meters.

1420. Re: 10 meter antenna and radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-15 02:28:41 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <xrHGi.2375$4J3.1781@newssvr22.news.prodigy.net>
Source record: 36340

Denno wrote:
> I'm hoping someone out there has had some luck with medium range
> consistency (300 miles in my case) at 10 meters.

300 miles is close to NVIS propagation and is
very unlikely on 10m at the present time.
--
73, Cecil http://www.w5dxp.com

1421. Re: 10 meter antenna and radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-15 02:48:08 UTC
From: ricknj10@hotmail.com
Message-ID: <46eb471a.37778765@news.optonline.net>
Source record: 36341

If somehow you can sell that 10 m rig and get any kind of old all band SSB transceiver, you can work your buddy 99% of the time on 75 meters with a simple dipole. That's what 75 meters is made for. You can sit and talk for hours, armchair copy. And when he isn't around you can talk to others, you can't do that with what you are trying to do on 10 m.

Rick K2XT

1422. Re: 10 meter antenna and radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-15 02:54:19 UTC
From: Jim-NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <9THGi.3364$3Y1.1311@newssvr17.news.prodigy.net>
Source record: 36342

Cecil Moore wrote:
> Denno wrote:
>> I'm hoping someone out there has had some luck with medium range
>> consistency (300 miles in my case) at 10 meters.
>
> 300 miles is close to NVIS propagation and is
> very unlikely on 10m at the present time.

IF super intense Es is going on (Usually in the summer, with
maybe couple times in Winter Solstius (xmas-new years), MAYBE -
but even this is a stretch! As stated, better 80-40 Meters, and BTW, IF
you should get THAT short skip on 10 (400 miles, or LESS), then bet 6
Meters is open! , but
then, I digress: Good Luck-- Jim NN7K

1423. Callsign hats at W. CT Hamfest this Sunday

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-15 02:59:16 UTC
From: JimR <kd1yv6@notmyemail.com>
Message-ID: <4durr4-4f8.ln1@oneyv.dyndns.org>
Source record: 36343

Callsign hats at W. CT Hamfest this Sunday
The Parent Shop, an ARRL authorized embroiderer, will be at the Western
Connecticut Hamfest. See http://www.danbury.org/cara/hamfest2007.html

WESTERN CONNECTICUT HAMFEST
Sponsored by: Candlewood Amateur Radio Association - CARA

Sunday, September 16, 2007
Table Set-up at 7:00 AM.
Open to the public 8:30 AM to 12:30 PM

Edmond Town Hall, 45 Main St. (Route 25), Newtown, CT Exit 10 off of I-84

Admission $5.00, Kids Under 12 FREE.
Tables $12.50 Tailgating $8.00. (Both INCLUDE 1 admission).

ARRL Sanctioned. Talk-in on 147.300 (+) PL 100.0.

Seminars
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- Airmail – How it works, incl demo
- Satellite Communications – How to do it
- NVIS Antennas (courtesy of ARRL)Handicapped Access. Ham Radio Equipment.
Batteries for Emergency Comms. Computers. Door Prizes.
Refreshments. Ample Parking. Rain or shine.

Only 12 minutes from Brewster, NY, 15 minutes from Waterbury, CT.

For information
call: (203) 938 4880 or (203) 775 1946

---------- Table Reservation ----------
Mail to: Candlewood Amateur Radio Association
c/o Joe deGroot, AB1DO,
30 Sunnyview Drive,
Redding, CT 06896

Name:_____
Address:_____
City/State:_____

Please reserve _____ tables at $10.00 each.
Yes / No : I need electricity

Make checks payable to CARA

1424. Re: 10 meter antenna and radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-15 03:47:25 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <hBIGi.266$oc2.26@trnddc04>
Source record: 36344

"Denno" <powerwashguy@aol.com> wrote in message
news:1189815507.253313.324210@19g2000hsx.googlegroups.com...
> Hi All. I will be getting my General Class license in the very near
> future I hope. Of course, they got rid of CW after I finally had 5
> WPM mastered. :-)
>
> I live in New England and a friend of mine lives about 300 air miles
> away. He has a 100 foot tower and it's amazing to see him work 20
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> large yard but it is heavily wooded. The ground ranges from rich loom
> to solid granite. A 44' EDZ is possible but definitely won't be easy,
> although I will certainly make the effort. I also have a 10 meter
> yagi sitting in pieces but if you think that may work, I will have to
> suspend it from trees in a fixed direction.
>
> Thanks!

Hi Denno

The greatest quality of HAM radio is your being able to experiment with
about anything that pleases you. It is so unlikely that you will ever be
satisfied with audio communication with your buddy 300 miles away on ten
meters, that you might consider using Skype for that ONE contact and set up
anything that seems interesting to you for ten meters. It wont take long
for you to know alot about what antenna is best for you.

Jerry

1425. Re: 10 meter antenna and radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-15 15:55:18 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <AL6dnfHbap3MnXHbnZ2dnUVZ_gOdnZ2d@comcast.com>
Source record: 36345

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:13emg6vcebodjee@corp.supernews.com...
>
> "Denno" <powerwashguy@aol.com> wrote in message
> news:1189815507.253313.324210@19g2000hsx.googlegroups.com...
>> Hi All. I will be getting my General Class license in the very near
>> future I hope. Of course, they got rid of CW after I finally had 5
>> WPM mastered. :-)
>>
>> I live in New England and a friend of mine lives about 300 air miles
>> away. He has a 100 foot tower and it's amazing to see him work 20
>> meters. He also mentioned that he is finding 10 meters is opening more
>> and is having luck there also.
>>
>> Unfortunately, all I have access to at this time is a 25 watt 10
>> meter rig. For my first HF antenna, I would like to be able to
>> communicate with my HAM friend as a priority, with any further
>> contacts a bonus. He recommended a full wavelength dipole set up as
>> an inverted V and experiment with wire angles. I know the inverted V
>> is much more omni directional than a flat dipole.
>>
>
> You will have to trade that 10 meter rig for something that will work 80
> meters or 40 meters. While the band may open sometime for that
> distance, it is too far away for ground wave and maybe too close for sky
> wave most of the time. No antenna that can be put up by most hams can
> help you reach that distance 99.9 % of the time on 10 meters.
>
>
>
With 100W, your best bet is probably 40 meters. People on 75 tend to run
some power.

Tam/WB2TT

1426. Re: 10 meter antenna and radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-15 15:57:14 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <7pvne39q325ncochn958a3gl61kbakjm5t@4ax.com>
Source record: 36346

On Fri, 14 Sep 2007 17:18:27 -0700, Denno <powerwashguy@aol.com>
wrote:

>Hi All. I will be getting my General Class license in the very near
>future I hope. Of course, they got rid of CW after I finally had 5
>WPM mastered. :-)
>
>I live in New England and a friend of mine lives about 300 air miles
>away. He has a 100 foot tower and it's amazing to see him work 20
>meters. He also mentioned that he is finding 10 meters is opening more
>and is having luck there also.
>
> Unfortunately, all I have access to at this time is a 25 watt 10
>meter rig. For my first HF antenna, I would like to be able to
>communicate with my HAM friend as a priority, with any further
>contacts a bonus. He recommended a full wavelength dipole set up as
>an inverted V and experiment with wire angles. I know the inverted V
>is much more omni directional than a flat dipole.
>
>So the antennas I have considered which I hope have the proper take
>off angles are:
>Inverted V
>Moxon Beam
>10 meter extended double Zepp (low radiation angle?)
>10 meter vertical loop (experiment with loop angle and feedpoints)
>Some type of sloper (dipole, end-fed, delta loop type?)
>
>I'm hoping someone out there has had some luck with medium range
>consistency (300 miles in my case) at 10 meters. I have a fairly
>large yard but it is heavily wooded. The ground ranges from rich loom
>to solid granite. A 44' EDZ is possible but definitely won't be easy,
>although I will certainly make the effort. I also have a 10 meter
>yagi sitting in pieces but if you think that may work, I will have to
>suspend it from trees in a fixed direction.
>
>Thanks!

The lowest point of the sunspot cycle is probably not a good time to
be using a 10-meter only rig -- while you're getting your General,
save a few dollars and get an all-band HF rig; there are plenty of
used rigs on eBay going for a few hundred or less. That will give you
the ability to work some of the bands that are a little more useful
during low sunspot activity.

You can always put up a simple 10 meter dipole, but I wouldn't obsess over trying to make 10 meters work at this time, except for scattered general communications, rather than trying to hit one single ham at 300 miles.

bob
k5qwg

1427. Re: 10 meter antenna and radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-15 16:19:48 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns99AC5EED7831Fdoldridgsprintca@64.59.135.159>
Source record: 36347

Denno <powerwashguy@aol.com> wrote in news:1189815507.253313.324210@
19g2000hsx.googlegroups.com:

> Hi All. I will be getting my General Class license in the very near
> future I hope. Of course, they got rid of CW after I finally had 5
> WPM mastered. :-)
>
> I live in New England and a friend of mine lives about 300 air miles
> away. He has a 100 foot tower and it's amazing to see him work 20
> meters. He also mentioned that he is finding 10 meters is opening more
> and is having luck there also.
>
> Unfortunately, all I have access to at this time is a 25 watt 10
> meter rig. For my first HF antenna, I would like to be able to
> communicate with my HAM friend as a priority, with any further
> contacts a bonus. He recommended a full wavelength dipole set up as
> an inverted V and experiment with wire angles. I know the inverted V
> is much more omni directional than a flat dipole.
>
> So the antennas I have considered which I hope have the proper take
> off angles are:
> Inverted V
> Moxon Beam
> 10 meter extended double Zepp (low radiation angle?)
> 10 meter vertical loop (experiment with loop angle and feedpoints)
> Some type of sloper (dipole, end-fed, delta loop type?)
>
> I'm hoping someone out there has had some luck with medium range
> consistency (300 miles in my case) at 10 meters. I have a fairly
> large yard but it is heavily wooded. The ground ranges from rich loom
> to solid granite. A 44' EDZ is possible but definitely won't be easy,
> although I will certainly make the effort. I also have a 10 meter
> yagi sitting in pieces but if you think that may work, I will have to
> suspend it from trees in a fixed direction.

You will not get a consistent path on 10m of 300 miles without some
pretty expensive antenna hardware and high power. Just cannot be done.
You'd actually get off cheaper trying to do it on 2m SSB (which would
probably work OK if you stacked two yagis one over the other and fed them
with a good amp). Your friend would have to reciprocate, though, as
these forward scatter systems are on the edge at best.

Seriously, what you need for that distance is a wire antenna for 75 and
40m. And 160m if you can do it. They don't have to be all THAT high,
though I'd try for about 50 feet if you can. Use 40m during the day, 75m

during the evening and morning and 160m at night. As the sunspot cycle improves, you'll find that 75 and 40 between them pretty much cover the distance, day or night.

--
Dave Oldridge+
ICQ 1800667

1428. Re: 10 meter antenna and radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-15 16:38:08 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <QTTGi.53899$YL5.16091@newssvr29.news.prodigy.net>
Source record: 36348

Dave Oldridge wrote:
> You will not get a consistent path on 10m of 300 miles without some
> pretty expensive antenna hardware and high power. Just cannot be done.

How about moon bounce? :-)

> You'd actually get off cheaper trying to do it on 2m SSB (which would
> probably work OK if you stacked two yagis one over the other and fed them
> with a good amp).

Which reminds me of something that nobody seems to
have mentioned. If a QSO is the only goal, satellite
communications should work well if not too crowded.
--
73, Cecil http://www.w5dxp.com

1429. Re: 10 meter antenna and radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-15 17:05:06 UTC
From: Denno <powerwashguy@aol.com>
Message-ID: <1189875906.042655.18460@r29g2000hsg.googlegroups.com>
Source record: 36349

Yes, you all pretty much confirmed my suspicions. I may try to set up
a dipole low to the ground NVIS style, but I know it's probably a
waste of time. I have a great time experimenting with shortwave
antennas (although my neighbors are going crazy wondering what I'm
doing) and haven't had much luck on 10 meters there, either.

My friend's setup is doing incredible things with 20 meters, but
they're all 1200+ miles away too.

I have a beautiful old Kenwood HF rig that I'm preparing to set up
now. Guess I had better start thinking about lower frequency
antennas.

Thanks for the advice, it is much appreciated!

On Sep 15, 12:38 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> Dave Oldridge wrote:
> > You will not get a consistent path on 10m of 300 miles without some
> > pretty expensive antenna hardware and high power. Just cannot be done.
>
> How about moon bounce? :-)
>
> > You'd actually get off cheaper trying to do it on 2m SSB (which would
> > probably work OK if you stacked two yagis one over the other and fed them
> > with a good amp).
>
> Which reminds me of something that nobody seems to
> have mentioned. If a QSO is the only goal, satellite
> communications should work well if not too crowded.
> --
> 73, Cecil http://www.w5dxp.com

1430. Re: 10 meter antenna and radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-15 22:22:38 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <clKdnVNO2PayxnHbnZ2dnUVZ_tyknZ2d@bright.net>
Source record: 36350

Depends on the type of satellite. LEOs will give a pass time of about
10 minutes per station and the birds coverage would need to overlap both
stations, so QSO time would most likely be 5 minutes or so. Using the
OSCAR 10 types give more time, but add complexity. Besides, I don't
think you can get by with a monoband (10M) radio...uplink and downlinks
are on separate bands. Packet works using the ISS as a digipeater (2M
though)...still short pass times :(

Scott
N0EDV

Cecil Moore wrote:

> Dave Oldridge wrote:
>
>> You will not get a consistent path on 10m of 300 miles without some
>> pretty expensive antenna hardware and high power. Just cannot be done.
>
>
> How about moon bounce? :-)
>
>> You'd actually get off cheaper trying to do it on 2m SSB (which would
>> probably work OK if you stacked two yagis one over the other and fed
>> them with a good amp).
>
>
> Which reminds me of something that nobody seems to
> have mentioned. If a QSO is the only goal, satellite
> communications should work well if not too crowded.

--
Scott
http://corbenflyer.tripod.com/
Gotta Fly or Gonna Die
Building RV-4 (Super Slow Build Version)

1431. Re: 10 meter antenna and radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 01:17:29 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns99ACBA1736AE7doldridgsprintca@64.59.135.159>
Source record: 36351

Cecil Moore <nospam@w5dxp.com> wrote in
news:QTTGi.53899$YL5.16091@newssvr29.news.prodigy.net:

> Dave Oldridge wrote:
>> You will not get a consistent path on 10m of 300 miles without some
>> pretty expensive antenna hardware and high power. Just cannot be
>> done.
>
> How about moon bounce? :-)

Well, I suppose. People are actually doing that on 10 and 15 when the
moon is near the horizon.
>
>> You'd actually get off cheaper trying to do it on 2m SSB (which would
>> probably work OK if you stacked two yagis one over the other and fed
>> them with a good amp).
>
> Which reminds me of something that nobody seems to
> have mentioned. If a QSO is the only goal, satellite
> communications should work well if not too crowded.

With one of the higher birds at apogee, that might actually be a good
solution.

--
Dave Oldridge+
ICQ 1800667

1432. Re: MCMASTER RESEARCHER VERIFIES NEW TYPE OF RADIO WAVE

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 01:21:41 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns99ACD97CED0B4mcoslocomcastnet@216.196.97.136>
Source record: 36352

Danny Richardson <n_group@k6mhe.com> wrote in
news:2g3ge3pnqek9hjav7hlp9cdptluib7dds0@4ax.com:

> http://download.antennex.com/listarch/media/news.pdf

Oddly enough the really big news is the "room temperature RF
superconductor plasma device. Heck, room temperature plasma is a kewl
trick itself. Fritz would be hugging himself in happiness!

But I do have to thank you for the link, because in further research I
found this little gem:

http://montalk.net/notes/potential-fields-primer

Those of us who are ever ready to suspend disbelief should be able to
spend days at the site, coming up with new science to confound us
skeptics!

- 73 de Mike KB3EIA -

1433. coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 02:16:39 UTC
From: WillWeav@gmail.com
Message-ID: <1189908999.715896.71610@19g2000hsx.googlegroups.com>
Source record: 36353

I have built several coaxial dipole antennas in the past with great success. What I like about this antenna is it is broadbanded. If you design it using the center of the band of your interest, for the most part you can cover the entire band without retuning. The problem I have always had with this is the antenna is somewhat fragile. I have used plexiglass squares to secure the center of the antenna and taped nylon fishing line to the legs for more strengh. Any one with more ideas? These are mostly useful in the HF range. You can find the info on designing these at http://www.amateurradios.info and other places on the net.

73's
Bill w5grx

1434. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 05:46:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fcifve$gr2$1@news.albasani.net>
Source record: 36354

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

And, of course, more:

http://www.eastandard.net/mag/mag.php?id=1143974577&catid=331

Regards,
JS

1435. Re: 10 meter antenna and radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 05:49:28 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fcig57$gr2$2@news.albasani.net>
Source record: 36355

John Smith wrote:
> Scott wrote:
>> Been quite a while since I've been on 10M, but I think 300 miles might
>> be a little tough. Too far for groundwave and I think a little too
>> close for E skip. Heck though, give it a try!
>> ...
>
> Yep. Too close for local, too far for skywave. But hey, ya never know.
>
> Solar activity is way down, it isn't like the 70's ...
>
> Regards,
> JS

Well, actually, too far for local, too close for skywave--but then, you
already knew that ;-)

JS

1436. Re: coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 06:22:55 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <bL-dncM1dPsiVnHbnZ2dnUVZ_vOlnZ2d@giganews.com>
Source record: 36356

Bill wrote:
> I have built several coaxial dipole antennas in the past with great
> success. What I like about this antenna is it is broadbanded. If you
> design it using the center of the band of your interest, for the most
> part you can cover the entire band without retuning. The problem I
> have always had with this is the antenna is somewhat fragile. I have
> used plexiglass squares to secure the center of the antenna and taped
> nylon fishing line to the legs for more strengh. Any one with more
> ideas? These are mostly useful in the HF range. You can find the info
> on designing these at http://www.amateurradios.info and other places
> on the net.
>
> 73's
> Bill w5grx

Hi Bill,

I use 4 wire cage designs for 80m (as an inverted vee) because bandwidth is inverse to the length/diameter ratio, and a single wire has a bad L/D on the lower frequency bands. A single-wire 125' dipole made from #14 (0.071" OD) has a L/D of over 20000:1 while a 4-wire 24"x24"cage (effective dia = 8") has a L/D of 190:1.

If cut for the middle of the band, VSWR is just a touch over 2:1 at 3.500 & 4.000 MHz. I make spreaders from 1/2" thinwall PVC tubing & crosses (24"x24"). I use #14ga 168-strand soft-drawn copper wire but smaller wire could be used w/o much sacrifice in strength. A handy online calculator is here: http://www.smeter.net/antennas/dipcage2.php

A few photos of my home QTH antenna: http://tinyurl.com/2puwx5, the apex at about 50' in a tree. A bunch of photos of my latest FD setup: http://tinyurl.com/38v9wn, the apex at 35' on a homebrew tilt-up/rotatable mast. I use a choke balun at the feedpoint. All parts came from Davis RF: http://www.davisrf.com/ because they have good prices and stock my preferred compression insulators.

Vy 73,
Bryan WA7PRC

1437. Complete Bollox? Or...Was: what makes it a balun????

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 10:08:32 UTC
From: "Mrs.Nugatory's, The Minimum's, G3VKI's, M3OSN's and Mick Hunter's Obsession" <me@privacy.net>
Message-ID: <fcivb4$tk9$1@aioe.org>
Source record: 36357
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,uk.radio.amateur

"Brian Reay" <see@website.invalid> wrote in message
news:3asEi.5728$gA6.228@newsfe2-gui.ntli.net...
> "Malkavian" <J.Russel@ntlworld.com> wrote in message
> news:5FmEi.46015$rr5.10209@newsfe1-win.ntli.net...
>> Hi peeps. In the last hf ssb competition a group of us put up some
>> antennas and a 2e0 took a length of wire, wrapped it around a bucket
>> seven times, removed the bucket, taped to coaxe up then put it inline
>> with the yagi. Now t may seem dim but to me this doesn't fit into my
>> cinceptions of a balun, not even one to one balun. So how was what the
>> 2e0 made a balun?
>
> If you aren't familiar with this type of balun and think of baluns as all
> being transformer like, I can understand your question. Basically a choke
> balun provides a line isolation function by virtue of the fact that any
> stray current on the outside of the coax outer has no counter current in
> the coax, thus it sees the coil as an inductor. Conversely, the (wanted)
> signal currents (on the outside of the inner and inside of the outer)
> cancel out the magnetic fields they form in the coil and thus don't see it
> as an inductor.

You seem to be remarkably ignorant about the containment of the fields
within the coaxial cable, OM. Neither within the configuration of the coil
nor in straight line sections of coax do the wanted signals contribute to
any
external fields (save, perhaps, in the case of leaky feeders).

The wanted currents just do not form any magnetic fields in the coil to be
cancelled out!

Such ignorance would be an absolute disgrace if it was expressed by, say,
one
charged with the training of all candidates for Radio Hammery in Britland!

1438. Re: Complete Bollox? Or...Was: what makes it a balun????

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 10:29:32 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <gA7Hi.65198$1G1.13809@newsfe2-win.ntli.net>
Source record: 36358
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,uk.radio.amateur

"Mrs.Nugatory's, The Minimum's, G3VKI's, M3OSN's and Mick Hunter's Obsession" <me@privacy.net> wrote in message news:fcivb4$tk9$1@aioe.org...
> You seem to be remarkably ignorant about the containment of the fields
> within the coaxial cable,

So how do YOU think the magnetic field is "contained"? You are keen to critise other's explanations, let us see yours.

Also, if there is no magnetic field do to the "wanted" (signal) currents, why are losses in baluns an issue? (That is one of the practical items I hinted at.)

1439. Re: Complete Bollox? Or...Was: what makes it a balun????

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 10:40:51 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <TK7Hi.44858$ph7.35462@newsfe5-win.ntli.net>
Source record: 36359
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,uk.radio.amateur

"Mrs.Nugatory's, The Minimum's, G3VKI's, M3OSN's and Mick Hunter's
Obsession" <me@privacy.net> wrote in message news:fcivb4$tk9$1@aioe.org...
>
> You seem to be remarkably ignorant about the containment of the fields
> within the coaxial cable, OM.

So how do you think the magnetic field is "contained" in a coaxial cable?
You are keen to criticise other's offerings but offer nothing yourself.

1440. Re: Complete Bollox? Or...Was: what makes it a balun????

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 10:47:35 UTC
From: "Mrs.Nugatory's, The Minimum's, G3VKI's, M3OSN's and Mick Hunter's Obsession" <me@privacy.net>
Message-ID: <fcj1kc$3uf$1@aioe.org>
Source record: 36360
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,uk.radio.amateur

"Brian Reay" <see@website.invalid> wrote in message
news:gA7Hi.65198$1G1.13809@newsfe2-win.ntli.net...
> "Mrs.Nugatory's, The Minimum's, G3VKI's, M3OSN's and Mick Hunter's
> Obsession" <me@privacy.net> wrote in message news:fcivb4$tk9$1@aioe.org...
> > You seem to be remarkably ignorant about the containment of the fields
>> within the coaxial cable,
> So how do YOU think the magnetic field is "contained"? You are keen to
> critise other's explanations, let us see yours.

This discussion is about the comments.....

" Conversely, the (wanted) signal
currents (on the outside of the inner and inside of the outer) cancel out
the magnetic fields they form in the coil and thus don't see it as an
inductor."

.....which discuss non-existent fields.

The containment of the wanted fields within the coaxial cable is another,
different,
discussion.

By all means start another thread to discuss whatever cranky theory you have
about
those contained fields, but I think that you won't find anyone to support
your
pet theories!

As to "critise (sic) other's explanations", I have not criticised any
other's explanation
about the fields _WITHIN_ the coaxial cable, so your challenge is a Straw
Man!

It is always possibly that I have misunderstood what you wrote, so, as the
discussion
is very much about what you wrote, perhaps you could explain your
comments,.....

"Conversely, the (wanted) signal
currents (on the outside of the inner and inside of the outer) cancel out
the magnetic fields they form in the coil and thus don't see it as an
inductor"

.....in a manner that is unambiguous? Then, perhaps, go onto another thread
to discuss your theory that the contained fields differ in operation to all
of the standard texts on the subject?

1441. Re: Complete Bollox? Or...Was: what makes it a balun????

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 11:04:11 UTC
From: Brian Reay <see@website.invalid>
Message-ID: <L48Hi.7285$gZ.993@newsfe7-win.ntli.net>
Source record: 36361
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,uk.radio.amateur

"Mrs.Nugatory's, The Minimum's, G3VKI's, M3OSN's and Mick Hunter's
Obsession" <me@privacy.net> wrote in message news:fcj1kc$3uf$1@aioe.org...
>
> "Brian Reay" <see@website.invalid> wrote in message
> news:gA7Hi.65198$1G1.13809@newsfe2-win.ntli.net...
>> "Mrs.Nugatory's, The Minimum's, G3VKI's, M3OSN's and Mick Hunter's
>> Obsession" <me@privacy.net> wrote in message
>> news:fcivb4$tk9$1@aioe.org...
>> > You seem to be remarkably ignorant about the containment of the fields
>>> within the coaxial cable,
>> So how do YOU think the magnetic field is "contained"? You are keen to
>> critise other's explanations, let us see yours.
>
> This discussion is about the comments.....
>
> " Conversely, the (wanted) signal
> currents (on the outside of the inner and inside of the outer) cancel out
> the magnetic fields they form in the coil and thus don't see it as an
> inductor."
>
> .....which discuss non-existent fields.
>
> The containment of the wanted fields within the coaxial cable is another,
> different,
> discussion.

So you don't have a better explanation, fair enough why didn't you just say
so?

Until you come up with something better, mine seems to be the one in game.

Once again Chippenham is a Foot in Mouth, technical knowledge exclusion
zone.................

By the way, I suggest you think about losses in the core of
baluns.....................

1442. Re: Complete Bollox? Or...Was: what makes it a balun????

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 12:11:03 UTC
From: "Mrs.Nugatory's, The Minimum's, G3VKI's, M3OSN's and Mick Hunter's Obsession" <me@privacy.net>
Message-ID: <fcj6gs$i0g$1@aioe.org>
Source record: 36362
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,uk.radio.amateur

"Brian Reay" <see@website.invalid> wrote in message
news:L48Hi.7285$gZ.993@newsfe7-win.ntli.net...
> "Mrs.Nugatory's, The Minimum's, G3VKI's, M3OSN's and Mick Hunter's
> Obsession" <me@privacy.net> wrote in message news:fcj1kc$3uf$1@aioe.org...
>> This discussion is about the comments.....
>> " Conversely, the (wanted) signal
>> currents (on the outside of the inner and inside of the outer) cancel
>> out
>> the magnetic fields they form in the coil and thus don't see it as an
>> inductor."
>> .....which discuss non-existent fields.
>> The containment of the wanted fields within the coaxial cable is another,
>> different,
>> discussion.
> So you don't have a better explanation, fair enough why didn't you just
> say so?
> Until you come up with something better, mine seems to be the one in game.
> Once again Chippenham is a Foot in Mouth, technical knowledge exclusion
> zone.................

So, you are unable to explain your assertion and resort to rather silly and
infantile
interjections in a forlorn attempt to divert attention?

You said the following.....
" Conversely, the (wanted) signal
currents (on the outside of the inner and inside of the outer) cancel out
the magnetic fields they form in the coil and thus don't see it as an
inductor."
.....which discusses non-existent fields.

Unless you now justify your own remarks you will lose face.

No amount of bluster, spin-doctoring, side-stepping, bullshitting and
downright lying
from you will hide the fact that you are losing face.

I will be more than happy to reply with an explanation once you offer a
first explanation
of yours of your assertion quoted above. You made an assertion, I replied
with an assertion.
You want an explanation from me, you start with your own explanation

Over to you.....

(The clock is ticking, your face is reddening)

1443. Re: Complete Bollox? Or...Was: what makes it a balun????

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 12:12:38 UTC
From: "Mrs.Nugatory's, The Minimum's, G3VKI's, M3OSN's and Mick Hunter's Obsession" <me@privacy.net>
Message-ID: <fcj6jq$i97$1@aioe.org>
Source record: 36363
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,uk.radio.amateur

"Mrs.Nugatory's, The Minimum's, G3VKI's, M3OSN's and Mick Hunter's
Obsession" <me@privacy.net> wrote in message news:fcj6gs$i0g$1@aioe.org...
> I will be more than happy to reply with an explanation once you offer a
> first explanation
> of yours of your assertion quoted above. You made an assertion, I replied
> with an assertion.
> You want an explanation from me, you start with your own explanation
> Over to you.....
> (The clock is ticking, your face is reddening)

Or is this to be your "e^(-jwt) is a function that decreases with t
increasing" all
over again?

"Drub, drub, drub, M3 in a tub"

1444. Re: Complete Bollox? Or...Was: what makes it a balun????

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 13:02:54 UTC
From: "Mrs.Nugatory's, The Minimum's, G3VKI's, M3OSN's and Mick Hunter's Obsession" <me@privacy.net>
Message-ID: <fcj9i2qrd1@aioe.org>
Source record: 36364
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,uk.radio.amateur

Crossposts to authoritarian groups (remove by the red-faced loser)
restored.....

"Brian Reay" <see@website.invalid> wrote in message
news:Y89Hi.37125$mZ5.22003@newsfe6-win.ntli.net...
> "Mrs.Nugatory's, The Minimum's, G3VKI's, M3OSN's and Mick Hunter's
> Obsession" <me@privacy.net> wrote in message news:fcj6gs$i0g$1@aioe.org...
>> You said the following.....
>> " Conversely, the (wanted) signal
>> currents (on the outside of the inner and inside of the outer) cancel
>> out
>> the magnetic fields they form in the coil and thus don't see it as an
>> inductor."
>> .....which discusses non-existent fields.
>
> The fields still exist, they just cancel each other out.
>
> Now, you may not see that, fine. As I've said so many times before, the
> fact you don't know any better is of little matter.

1445. Re: Complete Bollox? Or...Was: what makes it a balun????

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 13:04:42 UTC
From: "Mrs.Nugatory's, The Minimum's, G3VKI's, M3OSN's and Mick Hunter's Obsession" <me@privacy.net>
Message-ID: <fcj9lf$r0m$1@aioe.org>
Source record: 36365
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,uk.radio.amateur

Crossposts to authoritarian groups (removed by cowardly red-faced loser)
restored...

Brian, OM, you were drubbed over this some time ago.

"Brian Reay" <see@website.invalid> wrote in message
news:Bn9Hi.32559$Db6.20111@newsfe3-win.ntli.net...
> "Mrs.Nugatory's, The Minimum's, G3VKI's, M3OSN's and Mick Hunter's
> Obsession" <me@privacy.net> wrote in message news:fcj6jq$i97$1@aioe.org...
>> Or is this to be your "e^(-jwt) is a function that decreases with t
>> increasing" all
>> over again?
> Don't tell me you STILL don't understand that!

1446. Re: Understanding Yagi antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 13:17:47 UTC
From: Curt Christianson <curtchristnsn@NOSPAM.Yahoo.com>
Message-ID: <13eqb7sc344l1e3@corp.supernews.com>
Source record: 36366
Cross-posted to: rec.radio.amateur.antenna,alt.internet.wireless

Hi Mike,

That is a very complex subject. I would go to the library and check out a good book on antenna theory. "The ARRL Antenna Book", while aimed at amateur radio operators would still provide you with more theory than you're likely to even need to know. An excellent book!

--
HTH,
Curt

Windows Support Center
www.aumha.org
Practically Nerded,...
http://dundats.mvps.org/Index.htm

"amdx" <amdx@knology.net> wrote in message
news:c5c3c$46eafa66$18d6b40c$17868@KNOLOGY.NET...
| I've posted a picture on >alt.binaires.schematics.electronic<
| to an effort to help me get a better understanding of an antenna.
| It is a 2.4Ghz antenna about 18" long
| The driven element is a copper ribbon 0.2" wide by 0.032" thick.
| The copper ribbon forms a loop about 2" wide by 0.625" tall.
| The gap in the ribbon would be 0.020", but note; in the pictures
| a moon shaped piece has been cut from both ends. I think this
| moon cut effectively make the gap look larger.
| The total coax length is 2.350", the shield a bit shorter at 2.08".
| There are 4 toroids on the coax. These are under a piece of heat
| shrink, so I have no idea what material they would be.
| All element spacings are all equal and element lengths are within
| .030" of each other. I think they were designed to be the same but
| manufacturing tolerances made the differences. The reflector is longer.
| So now what can the group tell me about;
| Driven element impedance
| the gap
| coax length impedance transformation
| the 4 toroids
| Thanks for the help, if you need any other details let me know.
| Mike
|
|

1447. Re: Complete Bollox? Or...Was: what makes it a balun????

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 13:31:48 UTC
From: "Mrs.Nugatory's, The Minimum's, G3VKI's, M3OSN's and Mick Hunter's Obsession" <me@privacy.net>
Message-ID: <fcjb88vto1@aioe.org>
Source record: 36367
Cross-posted to: alt.engineering.electrical,rec.radio.amateur.antenna,uk.radio.amateur

"Brian Reay" <see@website.invalid> wrote in message
news:Y89Hi.37125$mZ5.22003@newsfe6-win.ntli.net...
> "Mrs.Nugatory's, The Minimum's, G3VKI's, M3OSN's and Mick Hunter's
> Obsession" <me@privacy.net> wrote in message news:fcj6gs$i0g$1@aioe.org...
>> You said the following.....
>> " Conversely, the (wanted) signal
>> currents (on the outside of the inner and inside of the outer) cancel
>> out
>> the magnetic fields they form in the coil and thus don't see it as an
>> inductor."
>> .....which discusses non-existent fields.
> The fields still exist, they just cancel each other out.
> Now, you may not see that, fine. As I've said so many times before, the
> fact you don't know any better is of little matter.

And so, as the Sun sinks slowly in the West, Brian Reay M3OSN, director
of the RSCB, runs away with his tail between his legs. (_ONCE_ again!!!!!)

Perhaps it is no wonder the gangrenous degeneration of standards as
represented
by the M3/CB Fools' Licence scheme when the chief L.I.A.R. of the RSCB (a
commercial
book seller that vaunts itself, falsely, as the representative of all Radio
Hams and Short Wave
Listeners) is so mediocre both in his technical knowledge and in his
standard of debate?

Perhaps it is no wonder the decline in social behaviour when he who is
charged with the
education of youngsters demonstrates such an infantile abusive role model if
ever he
is challenged?

Sic transit gloria Mundi.

1448. Re: G5RV & Tuner Question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 14:22:00 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <F0bHi.65516$xZ2.41170@newsfe10.phx>
Source record: 36368

Many thanks to all that took the time to answer the G5RV & Tuner question.
My friend and I learned a lot and he is investigating an external tuner.
Great news group - kudos
The Shadow

"The Shadow" <Cranston@CobaltClub.com> wrote in message
news:KKWFi.115362$dI1.98604@newsfe08.phx...
>A friend bought a G5RV Lite and has a Kenwood TS-480SAT, hoping the ATU in
>the Kenwood would be able to tune all bands.
> But only two bands would tune - 6m and 10m.
>
> He then borrowed a G5RV Jr. Same results.
>
> So question is does G5RV's in general require an external tuner with a
> wider matching range than the typical internal ATU's in late model rigs??
>
> The Shadow usually knows. (;-)

1449. Re: Understanding Yagi antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 14:47:49 UTC
From: "Helmut Wabnig"
Message-ID: <s3gqe3l0nq3fjch8miu5ekolge908m57o6@4ax.com>
Source record: 36369
Cross-posted to: rec.radio.amateur.antenna,alt.internet.wireless

On Fri, 14 Sep 2007 16:17:42 -0500, "amdx" <amdx@knology.net> wrote:

>I've posted a picture on >alt.binaires.schematics.electronic<
>to an effort to help me get a better understanding of an antenna.
>It is a 2.4Ghz antenna about 18" long
>The driven element is a copper ribbon 0.2" wide by 0.032" thick.
>The copper ribbon forms a loop about 2" wide by 0.625" tall.
>The gap in the ribbon would be 0.020", but note; in the pictures
>a moon shaped piece has been cut from both ends. I think this

yes, it was made on a moonday.

>moon cut effectively make the gap look larger.
> The total coax length is 2.350", the shield a bit shorter at 2.08".
>There are 4 toroids on the coax. These are under a piece of heat
>shrink, so I have no idea what material they would be.
> All element spacings are all equal and element lengths are within
>.030" of each other. I think they were designed to be the same but
>manufacturing tolerances made the differences. The reflector is longer.
> So now what can the group tell me about;
>Driven element impedance
>the gap
>coax length impedance transformation

>the 4 toroids
noise reduction ferrite beads or toroids
Line filters get rid of RF travelling along the outer surface of the
coax's shield and avoid, consequently, any TVI/BCI. The best
performance can be seen when connected right into the feed line at the
antenna base!

>Thanks for the help, if you need any other details let me know.
> Mike
>
hard not to be cynic.
w.

1450. Re: coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 15:31:14 UTC
From: mcalhoun@ksu.edu
Message-ID: <fcji82$chd@unix1.cc.ksu.edu>
Source record: 36370

>I use 4 wire cage designs for 80m (as an inverted vee) because bandwidth is
>....[snip]....
>has a L/D of over 20000:1 while a 4-wire 24"x24"cage (effective dia = 8")...

I'm curious why a 2-foot-square cage has an effective diameter of only 8"

>If cut for the middle of the band, VSWR is just a touch over 2:1 at 3.500 &
>4.000 MHz. I make spreaders from 1/2" thinwall PVC tubing & crosses
>(24"x24"). I use #14ga 168-strand soft-drawn copper wire ....

Doesn't soft-drawn copper stretch like mad?

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
NRA Life Member & Certified Instructor for Rifle, Pistol, & Home Firearm Safety
Also Certified Instructor for the Kansas Concealed-Carry Handgun (CCH) license

1451. Re: Understanding Yagi antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 16:16:48 UTC
From: mike <amdx@knology.net>
Message-ID: <181d$46ed56f2$18d6606a$16570@KNOLOGY.NET>
Source record: 36371
Cross-posted to: rec.radio.amateur.antenna,alt.internet.wireless

"Helmut Wabnig" <.... .-- .- -... -. .. --. @ .- --- -. dot .- - > wrote in
message news:s3gqe3l0nq3fjch8miu5ekolge908m57o6@4ax.com...
> On Fri, 14 Sep 2007 16:17:42 -0500, "amdx" <amdx@knology.net> wrote:
>
>>I've posted a picture on >alt.binaires.schematics.electronic<
>>to an effort to help me get a better understanding of an antenna.
>>It is a 2.4Ghz antenna about 18" long
>>The driven element is a copper ribbon 0.2" wide by 0.032" thick.
>>The copper ribbon forms a loop about 2" wide by 0.625" tall.
>>The gap in the ribbon would be 0.020", but note; in the pictures
>>a moon shaped piece has been cut from both ends. I think this
>
> yes, it was made on a moonday.
>
>>moon cut effectively make the gap look larger.
>> The total coax length is 2.350", the shield a bit shorter at 2.08".
>>There are 4 toroids on the coax. These are under a piece of heat
>>shrink, so I have no idea what material they would be.
>> All element spacings are all equal and element lengths are within
>>.030" of each other. I think they were designed to be the same but
>>manufacturing tolerances made the differences. The reflector is longer.
>> So now what can the group tell me about;
>>Driven element impedance
>>the gap
>>coax length impedance transformation
>
>
>>the 4 toroids
> noise reduction ferrite beads or toroids
> Line filters get rid of RF travelling along the outer surface of the
> coax's shield and avoid, consequently, any TVI/BCI. The best
> performance can be seen when connected right into the feed line at the
> antenna base!
>
>
>
>
>>Thanks for the help, if you need any other details let me know.
>> Mike
>>
> hard not to be cynic.
> w.
Do you mean a cynic, as in ;

a faultfinding captious critic; especially : one who believes that human conduct is motivated wholly by self-interest.
Well yes, I ask the questions because (I) want to know, but if someone else learns from the answers, I don't care.
"Moonday" hurumpf ;-}
Mike

1452. Re: coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 16:28:26 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <XJ6dnX3LYdg3xHDbnZ2dnUVZ_tmhnZ2d@giganews.com>
Source record: 36372

Myron wrote:
> >I use 4 wire cage designs for 80m (as an inverted vee) because bandwidth
is
> >....[snip]....
> >has a L/D of over 20000:1 while a 4-wire 24"x24"cage (effective dia =
8")...
>
> I'm curious why a 2-foot-square cage has an effective diameter of only 8"

It's apparent to me that it can't appear that large because it's 4 strands of 14ga wire instead of a 24" diameter cylinder. I obtained the 8" figure from the calculator program at: http://www.smeter.net/antennas/dipcage2.php. I don't know how the effective diameter was calculated.

> >If cut for the middle of the band, VSWR is just a touch over 2:1 at 3.500
&
> >4.000 MHz. I make spreaders from 1/2" thinwall PVC tubing & crosses
> >(24"x24"). I use #14ga 168-strand soft-drawn copper wire ....
>
> Doesn't soft-drawn copper stretch like mad?

I was told by the CSR at Davis RF that it's soft-drawn but I expect it's hard-drawn -- an unscientific stretch test in my workshop appears to confirm this. Over a 12 month period, a 12ga single-wire 80m dipole (with choke balun & RG58 feedline) did not noticeably stretch. Also consider that in my case, the cage dipole is in inverted vee form, so there's no concern about wire stretch caused by the heavier LMR400 feedline & balun weight. Also, it's 4 strands of 14ga wire instead of one, and the spreaders don't add much weight.

> --
> --Myron A. Calhoun.

Bryan WA7PRC

1453. Re: Understanding Yagi antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 16:38:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ohmqe3tjmtbedm1hcgfeg93ldhkm2ppfh4@4ax.com>
Source record: 36373
Cross-posted to: rec.radio.amateur.antenna,alt.internet.wireless

On Fri, 14 Sep 2007 16:17:42 -0500, "amdx" <amdx@knology.net> wrote:

>I think this
>moon cut effectively make the gap look larger.

Hi Mike,

It is simply a function of the mechanical connection of the line at
that point (the inner conductor needs the cut-out and the shield has a
closer point of attachment).

> So now what can the group tell me about;
>Driven element impedance

50 Ohms.

>the gap

the distance between the closest points of contact before the line was
installed - i.e. the thickness of the inner conductor's insulation
(true for absolutely every antenna built).

>coax length impedance transformation

Not sure that matters if in fact it has been designed to be a Z
transformer. If so, then you have one of several dimensions possible
n/4 wavelength or n/2 wavelength where n is odd.

>the 4 toroids

Decoupling.

73's
Richard Clark, KB7QHC

1454. Re: Understanding Yagi antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 17:45:31 UTC
From: mike <amdx@knology.net>
Message-ID: <55e76$46ef21e5$18d6b40c$31583@KNOLOGY.NET>
Source record: 36244
Cross-posted to: rec.radio.amateur.antenna,alt.internet.wireless

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:ohmqe3tjmtbedm1hcgfeg93ldhkm2ppfh4@4ax.com...
> On Fri, 14 Sep 2007 16:17:42 -0500, "amdx" <amdx@knology.net> wrote:
>
>>I think this
>>moon cut effectively make the gap look larger.
>
> Hi Mike,
>
> It is simply a function of the mechanical connection of the line at
> that point (the inner conductor needs the cut-out and the shield has a
> closer point of attachment).
>
>> So now what can the group tell me about;
>>Driven element impedance
>
> 50 Ohms.
>
>>the gap
>
> the distance between the closest points of contact before the line was
> installed - i.e. the thickness of the inner conductor's insulation
> (true for absolutely every antenna built).

I had to go back and look at the picture, but that's interesting, the
cutout
makes for a good fit for the mechanical connection to the coax.
And I'll use that,
> "i.e. the thickness of the inner conductor's insulation"
for the gap in the antenna I'm building.
Thanks

>
>>coax length impedance transformation
>
> Not sure that matters if in fact it has been designed to be a Z
> transformer. If so, then you have one of several dimensions possible
> n/4 wavelength or n/2 wavelength where n is odd.
>
>>the 4 toroids
>
> Decoupling.
>
> 73's

> Richard Clark, KB7QHC

1455. Re: Understanding Yagi antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 18:34:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13eqtps2j19ibb2@corp.supernews.com>
Source record: 36374
Cross-posted to: rec.radio.amateur.antenna,alt.internet.wireless

Curt Christianson wrote:
> Hi Mike,
>
> That is a very complex subject. I would go to the library and check out a
> good book on antenna theory. "The ARRL Antenna Book", while aimed at amateur
> radio operators would still provide you with more theory than you're likely
> to even need to know. An excellent book!

To learn specifically about Yagi antennas, it's hard to beat Lawson's
Yagi Antenna Design.

Roy Lewallen, W7EL

1456. 2m Repater intermod problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 20:41:21 UTC
From: Lex-Lutor <lutor-lexBEZ-ovoga@post.t-com.hr>
Message-ID: <fck4s2$dj6$1@ss408.t-com.hr>
Source record: 36375
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Any idea how to slove intermod problems at repeater location, very close (150 meters) to VHF repeater antenna is located FM-TV tower with 7 strong FM channels, nominal power is from 5-10KW + antenna system gain. Bad thing is that combination of 104.7 MHz + 145.7 MHz (repeater tx) - 105.3 MHz = 145.1 MHz (same frequency for repeater input) !

There is 3 +3 cavity duplexer pass/reject type and professional type of vertical dipole with 0 dB, I`m sure if notch cavity can change this problem or installing high quality FM Trap filter to existing setup.

Tnx for any help !

1457. Re: 2m Repater intermod problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 21:11:28 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <2Z6dne-PI75XBnDbnZ2dnUVZ_qelnZ2d@bright.net>
Source record: 36376

Dear "Lex--Lutor" (no call sign):

1. In North America, the frequency spacing between FM broadcast transmitters in the same area is usually 800 kHz. 105.3 MHz - 104.7 MHz = 600 kHz. Are you sure about the two FM broadcast frequencies?

2. IM is produced from a nonlinear response in something. The odds are strong that the 145.1 MHz signal is being produced in one or more of the three transmitters - most likely one or both of the FM broadcast transmitters. Adding filtering in your system will have no effect if the IM is produced outside.

3. It is a good idea to perform a classical IM analysis (up to at least seventh order) that involves all seven of the broadcast frequencies and to use the analysis to select a repeater pair that does not involve an IM frequency.

4. Theoretically, you could place a filter or isolator in the broadcast transmission lines.

73, Mac N8TT

cross posting has been changed
--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Lex-Lutor" <lutor-lexBEZ-ovoga@post.t-com.hr> wrote in message
news:fck4s2$dj6$1@ss408.t-com.hr...
> Any idea how to slove intermod problems at repeater location, very close (
> 150 meters) to VHF repeater antenna is located FM-TV tower with 7 strong
FM
> channels, nominal power is from 5-10KW + antenna system gain. Bad thing is
> that combination of 104.7 MHz + 145.7 MHz (repeater tx) - 105.3 MHz =
145.1
> MHz (same frequency for repeater input) !
>
>
>
> There is 3 +3 cavity duplexer pass/reject type and professional type of
> vertical dipole with 0 dB, I`m sure if notch cavity can change this
problem
> or installing high quality FM Trap filter to existing setup.
>
>
>
> Tnx for any help !

>
>

1458. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 21:52:57 UTC
From: rram@panix.com
Message-ID: <fck8h8$44j$1@reader1.panix.com>
Source record: 36377
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.info

The rec.radio.info newsgroup, first established in 1993, has been recently revived by an active moderation team. We are currently seeking suitable information, FAQ, and bulletin articles from the entire rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our newsgroup.

We are seeking a replacement maintainer for the following information bulletin formerly posted to rec.radio.amateur.* (and currently archived at http://www.faqs.org/faqs/radio/personal-intro/):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this article updated and automatically posted again at a regular interval. This would include establishing contact with the original maintainer for any necessary permissions. We would prefer to seek a new, dedicated maintainer at this time, rather than start auto-posting the original article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to rec-radio-info-request@panix.com.

1459. Ratio A/B

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 21:55:27 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46edaf2a$0$16513$4c368faf@roadrunner.com>
Source record: 36381

I am trying to teach a test equipment class. In the course of explaning the purpose of the input A /input B ratio setting of a fequency counter I explained this as using an external time base where the counter will read events A per event B. I have been told I am wrong but so far noone who has said I was wrong cares to give a better explanation. I freely admit that I have never had call to use this feature of a frequency counter. The example that I gave was that if the output of a magnetic trannsducer that picked up pulses from a flywheel was coupled to A input then the proper time base could be calculated and applied to the B input so the display on the counter would be in RPM. Is this not correct?

Jimmie

1460. Re: 2m Repater intermod problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 21:57:49 UTC
From: dplatt@radagast.org
Message-ID: <tfl0s4-rkq.ln1@radagast.org>
Source record: 36378
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

>Any idea how to slove intermod problems at repeater location, very close (
>150 meters) to VHF repeater antenna is located FM-TV tower with 7 strong FM
>channels, nominal power is from 5-10KW + antenna system gain. Bad thing is
>that combination of 104.7 MHz + 145.7 MHz (repeater tx) - 105.3 MHz = 145.1
>MHz (same frequency for repeater input) !
>
>There is 3 +3 cavity duplexer pass/reject type and professional type of
>vertical dipole with 0 dB, I`m sure if notch cavity can change this problem
>or installing high quality FM Trap filter to existing setup.

The intermod could be arising in any number of locations. Some are
probably filterable, others probably aren't.

You could be getting intermod from:

- Mixing of the 2-meter TX with commercial FM, in your 2-meter TX
finals (FM "coming back down the cable"). The best solution to
this would probably be a ferrite circulator/isolator, located
between your TX output and the duplexer DX input... this will
divert any RF coming back down through the cable and duplexer into
a dummy load before it reaches your finals and mixes in.

- Overload of your receiver by incoming commercial FM - you might see
intermod or desense from this. You could try a notch filter tuned
to the commercial FM signal, or a high-pass filter to attenuate the
whole range below 144 MHz.

- Intermod created in the antenna system itself, due to some form of
nonlinearity (corroded connections or joints, presence of dissimilar-
metal junctions where plugs and jacks interconnect, etc.). In some
cases you may be able to get rid of this by cleaning up the
antenna... e.g. eliminate nickel-placed N/UHF connectors (use only
high-grade silverplated connectors), make sure that all cable
connections are tight and weatherproofed, check all bonding
connections to make sure that they are solid and not corroded, etc.

You can't get rid of this latter sort of intermod with a filter, as
it's being created outside of your electronics and the resulting
intermod signal is right on the frequency you want to receive.

Screening the antenna from the commercial tower, or placing your
antenna on that same tower but directly above or below the FM
antennas, may gain you enough reduction in commercial-FM signal
strength to bring the intermod to within tolerable proportions.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1461. Re: 2m Repater intermod problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 21:59:01 UTC
From: Lex-Lutor <lutor-lexBEZ-ovoga@post.t-com.hr>
Message-ID: <fck9dnntr1@ss408.t-com.hr>
Source record: 36379

> 1. In North America, the frequency spacing between FM broadcast
> transmitters in the same area is usually 800 kHz. 105.3 MHz - 104.7 MHz =
> 600 kHz. Are you sure about the two FM broadcast frequencies?

Hy,

Yes I`m sure, in EU we have RX feq - 600 KHz for TX on 2m Ham band, for
PMR band it is RX + 4.5 MHz for TX ..

>
> 2. IM is produced from a nonlinear response in something. The odds are
> strong that the 145.1 MHz signal is being produced in one or more of the
> three transmitters - most likely one or both of the FM broadcast
> transmitters. Adding filtering in your system will have no effect if the
IM
> is produced outside.

I made a spectrum check at RX side after duplexer, there is lot of junk but
145.1 is clear, than I put repater in TX mode with spectrum connected at
duplexer RX port and you can see a modulated carrier - 95 to -90 dbm. In
demodulation mode (Wide) you can hear mixed program of this two
radiostations. I repat this test few times on two different spectrum
analyzers with and WO external attenuators in input line with same results.

I`m sure where is source of IM, repater antenna, coax line, or duplexer?
Maybe all 3-parts togother since duplexer is not Hi.quality, it is made from
aluminium cavity and Cu plunger, no sliver plating, RX and TX side are
separated so there is no good DC connection !

> 3. It is a good idea to perform a classical IM analysis (up to at least
> seventh order) that involves all seven of the broadcast frequencies and to
> use the analysis to select a repeater pair that does not involve an IM
> frequency.

:-((very hard, only if we change SHIFT

>
> 4. Theoretically, you could place a filter or isolator in the broadcast
> transmission lines.

:-))

TNX Mac for all.....

1462. Re: coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 22:09:47 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <ge9re3hcrpjrm8ooq22av1tn5j6of2f6d0@4ax.com>
Source record: 36380

On Sat, 15 Sep 2007 19:16:39 -0700, WillWeav@gmail.com wrote:

>I have built several coaxial dipole antennas in the past with great
>success. What I like about this antenna is it is broadbanded. If you
>design it using the center of the band of your interest, for the most
>part you can cover the entire band without retuning. The problem I
>have always had with this is the antenna is somewhat fragile. I have
>used plexiglass squares to secure the center of the antenna and taped
>nylon fishing line to the legs for more strengh. Any one with more
>ideas? These are mostly useful in the HF range. You can find the info
>on designing these at http://www.amateurradios.info and other places
>on the net.
>
>73's
>Bill w5grx

Hello Bill,

I can understand that the coax dipoles you built are somewhat more broadbanded than a simple dipole. However,
I suspect that you are unaware of the reason for the broadbanding. Sorry to tell you, but it is achieved only
by the resistive losses in the coax, and not by the reactance obtained by the two sections of shorted coax, as
incorrectly stated in several published articles.

I have made extensive measurements and calculations that prove my statement above. I have reported these
measurements and calculations in both QST and in my book 'Reflections'. The QST reference appears in the
Technical Correspondence, September 1976 issue, and in Chapter 18 in Reflections. You can read Chapter 18 from
my web page at www.w2du.com.

On the other hand, realistic broadbanding, without the loss introduced by the resistances in the coaxial
dipole, can be obtained by the 'cage' dipole, using several parallel wires separated by spacers, as mentioned
other posts appearing in this thread.

Walt, W2DU

1463. Re: coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-16 23:37:52 UTC
From: Dale Parfitt <parinc@verizon.net>
Message-ID: <k7jHi.550$6o2.304@trnddc05>
Source record: 36382

> Hello Bill,
>
> I can understand that the coax dipoles you built are somewhat more
> broadbanded than a simple dipole. However,
> I suspect that you are unaware of the reason for the broadbanding. Sorry
> to tell you, but it is achieved only
> by the resistive losses in the coax, and not by the reactance obtained by
> the two sections of shorted coax, as
> incorrectly stated in several published articles.
>
> I have made extensive measurements and calculations that prove my
> statement above. I have reported these
> measurements and calculations in both QST and in my book 'Reflections'.
> The QST reference appears in the
> Technical Correspondence, September 1976 issue, and in Chapter 18 in
> Reflections. You can read Chapter 18 from
> my web page at www.w2du.com.
>
> On the other hand, realistic broadbanding, without the loss introduced by
> the resistances in the coaxial
> dipole, can be obtained by the 'cage' dipole, using several parallel wires
> separated by spacers, as mentioned
> other posts appearing in this thread.
>
> Walt, W2DU

Hi Walt et al,
I was going to point out the same flawed thinking. I believe Frank Witt also published the analysis for the flawed reasoning of the bazooka stubs correcting for the reactance of the dipole off resonance. He also published coaxial stub designs that did work in QST and several of the ARRL compendia. It is amazing to me that the bazooka is still used given the alternatives. One sight where thay are sold claims more gain too!

Dale W4OP

1464. Re: Ratio A/B

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-17 03:25:31 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1189999531.870368.308050@k79g2000hse.googlegroups.com>
Source record: 36383

On Sep 16, 2:55 pm, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
> I am trying to teach a test equipment class. In the course of explaning the
> purpose of the input A /input B ratio setting of a fequency counter I
> explained this as using an external time base where the counter will read
> events A per event B. I have been told I am wrong but so far noone who has
> said I was wrong cares to give a better explanation. I freely admit that I
> have never had call to use this feature of a frequency counter. The example
> that I gave was that if the output of a magnetic trannsducer that picked up
> pulses from a flywheel was coupled to A input then the proper time base
> could be calculated and applied to the B input so the display on the
> counter would be in RPM. Is this not correct?
>
> Jimmie

Seems about right me. Depending on the particular counter you could
possibly have A and B reversed. In general it will give you the ratio
between two frequencies. The way my counter works in that mode, B
replaces the timebase input to the decade divider, so that it's really
the frequency ratio A*(10^R)/B, where R is setting of the decade
divider.

Cheers,
Tom

1465. Re: Ratio A/B

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-17 07:04:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ae4se312mp8s60jsgi1ubh2t4u2o743aka@4ax.com>
Source record: 36384

On Sun, 16 Sep 2007 17:55:27 -0400, "Jimmie D"
<GFENDER@carolina.rr.com> wrote:

>I
>explained this as using an external time base where the counter will read
>events A per event B.

Hi Jimmie,

You desire a reading in RPM (and we still have a frequency counter where you could end up with a time interval counter if you invert relationships). Assuming the timing pulse indicates one revolution, it then requires a time base of one minute. This would be the conventional explanation and it would render an accurate determination provided your source doesn't drift during the sample period.

Counter naming conventions usually include a "trigger" and a "gate." Your A/B connectors and panel switches should indicate these conventions somewhere.

The time base input needs to go to the gating input (replacing the internal time base); the pulse being displayed in RPM goes into the trigger input. The gating input can either be direct, or through the internal divider. You may have to attend to details of gating pulse shape (square or otherwise which can really upset the applecart), and gating pulse trigger (edge or level). As you can see, the clock should be for two minutes for a square wave, level triggered gate; a one second pulse with a longer repetition rate providing you select the correct polarity; or if edge triggered, any pulse with a repetition rate of one minute. Mixing up the three can lead to confusion (and I may have confused this at this hour, others will no doubt clear the air if I have).

However, RPM applications are rarely stable, and more commonly you desire a quicker indication than once a minute. Further, the internal (usually decade) divider does nothing to satisfy these common complaints. It serves as a convenience if you lack a 0.016... Hz standard and instead have a 16.66... KHz xtal.

You can speed things up by having triggers arriving every, say, 60 degrees instead of every 360 degrees, not very difficult for slow machinery (cars do it all the time for Tachs) and it can clear up scaling (you are back into ordinary decimal time bases). Accuracy is rarely sought in these situations as machinery is often quite variable and high resolution is rarely demanded. If, on the other hand, you do want increased accuracy; then you abandon frequency counting and go to

interval counting instead - and then do the inversion outside the box.
This commonly occurs below 100 Hz to 1000 Hz.

Using a Strobotac is a far more engaging demonstration of frequency determination for students. This is especially so for a fan running in a dark room.

73's
Richard Clark, KB7QHC

1466. Re: Ratio A/B

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-17 16:03:17 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46eea53e$0$9573$4c368faf@roadrunner.com>
Source record: 36240

"Jimmie D" <GFENDER@carolina.rr.com> wrote in message
news:46edaf2a$0$16513$4c368faf@roadrunner.com...
>I am trying to teach a test equipment class. In the course of explaning
>the purpose of the input A /input B ratio setting of a fequency counter I
>explained this as using an external time base where the counter will read
>events A per event B. I have been told I am wrong but so far noone who has
>said I was wrong cares to give a better explanation. I freely admit that I
>have never had call to use this feature of a frequency counter. The example
>that I gave was that if the output of a magnetic trannsducer that picked up
>pulses from a flywheel was coupled to A input then the proper time base
>could be calculated and applied to the B input so the display on the
>counter would be in RPM. Is this not correct?
>
>
> Jimmie
>

While on the subject of freq counters I bought a Systron Donner 6152A at a
hamfest about a year ago paid 6$ for it. I had expected it to be junk so I
just got around to plugging it in and it all seems to work. Is this usually
considered a good instument?

Jimmie

1467. Re: Ratio A/B

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-17 16:21:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <4q9te3h4h0pvpcsdo8bhlgrrmobvr6q7hm@4ax.com>
Source record: 36241

On Mon, 17 Sep 2007 12:03:17 -0400, "Jimmie D"
<GFENDER@carolina.rr.com> wrote:

> Is this usually considered a good instument?

Hi Jimmie,

More counter than you can get anywhere for $6, certainly.

Mid 60s vintage, with limited frequency range and resolution. A certain amount of fussing around to extend it and perhaps issues of sensitivity, but still quite useful. I calibrated a ton of them (SDs), but I don't recall them being dogs - just not modern. Freq counter design is fairly straight forward once you get past those from the late 40s through early 60s (they REALLY qualify as museum pieces).

If you want to really qualify it, it should have a double oven xtal control. Single oven would be good. I would guess this model hasn't any oven at all and is simply tempco (although, that may be sophisticated in its own right, or possibly just xtal selected - the lowest grade of lab reference).

73's
Richard Clark, KB7QHC

1468. Re: Ratio A/B

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-17 16:40:35 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46eeadfb$0$32544$4c368faf@roadrunner.com>
Source record: 36242

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:4q9te3h4h0pvpcsdo8bhlgrrmobvr6q7hm@4ax.com...
> On Mon, 17 Sep 2007 12:03:17 -0400, "Jimmie D"
> <GFENDER@carolina.rr.com> wrote:
>
>> Is this usually considered a good instument?
>
> Hi Jimmie,
>
> More counter than you can get anywhere for $6, certainly.
>
> Mid 60s vintage, with limited frequency range and resolution. A
> certain amount of fussing around to extend it and perhaps issues of
> sensitivity, but still quite useful. I calibrated a ton of them
> (SDs), but I don't recall them being dogs - just not modern. Freq
> counter design is fairly straight forward once you get past those from
> the late 40s through early 60s (they REALLY qualify as museum pieces).
>
> If you want to really qualify it, it should have a double oven xtal
> control. Single oven would be good. I would guess this model hasn't
> any oven at all and is simply tempco (although, that may be
> sophisticated in its own right, or possibly just xtal selected - the
> lowest grade of lab reference).
>
> 73's
> Richard Clark, KB7QHC

1469. Re: 10 meter antenna and radiation angles

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-17 22:34:27 UTC
From: nm5k@wt.net
Message-ID: <1190068467.459260.288000@y42g2000hsy.googlegroups.com>
Source record: 36243

On Sep 15, 12:05 pm, Denno <powerwash...@aol.com> wrote:
> Yes, you all pretty much confirmed my suspicions. I may try to set up
> a dipole low to the ground NVIS style, but I know it's probably a
> waste of time.

I think you would be better off with a good vertical or ground plane.
There is not much point in running the typical "NVIS" antenna on
10m. There will be very few cases where the signal actually goes
straight up and down. Just doesn't happen on 10 much.
A low dipole will be the pits for most of the usual paths you
would work on 10m. It will be semi ok working skywave across
the country, but the good ground plane would likely be even
better. Probably by several db...
The ground/space wave with the low dipole will be half useless,
and much of the activity you will find on 10 will be fairly local at
times. In this case, the GP will smoke the dipole.
I used to hang out on 10 a lot several years ago, and if I had to
choose a single simple antenna, I'd use a good vertical or ground
plane as high as I could get it.
This will give the best overall performance for all the types of
paths you will likely work on 10m.
If you did get some short skip going, which is more likely
to be back scatter, or aurora, etc, the vertical will still do
the job as most will still be at a fairly low overall angles, unlike
the typical NVIS on 80m, etc.. There is very little true NVIS
on 10m. The skip zone is too long, even when it's short for
10..
MK

1470. Trying to Identify??

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 01:15:05 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <4q6dnVgxw7j7u3LbnZ2dnUVZ_ramnZ2d@comcast.com>
Source record: 36245

Chesapeake Microwave
MDL: 86-0142
Freq: 4 - 8 Ghz

SMA connector on 1 side of box & 4 SMA connectors on the other side of the aluminum box.

I think that it might be some kind of combiner or single input and multi-output device.

73's

1471. Propagation for Dummies

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 01:16:30 UTC
From: "Bob D." <bobmgtd@insightbb.com>
Message-ID: <H_2dnc51Xdwgu3LbnZ2dnUVZ_gOdnZ2d@insightbb.com>
Source record: 36246

I'm looking for a guide to "what bands are open when, and how far". I'd like to set up a schedule with a couple friends but I don't have a good feel for 'what band / what time'. Does anyone know of a good 'rule of thumb' reference that doesn't get deep in propagation theory?

--
Bob D. ND9B

1472. Re: Propagation for Dummies

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 01:52:47 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13eubrcb39rjb5a@corp.supernews.com>
Source record: 36247

"Bob D." <bobmgtd@insightbb.com> wrote in message
news:H_2dnc51Xdwgu3LbnZ2dnUVZ_gOdnZ2d@insightbb.com...
> I'm looking for a guide to "what bands are open when, and how far". I'd
> like to set up a schedule with a couple friends but I don't have a good
> feel for 'what band / what time'. Does anyone know of a good 'rule of
> thumb' reference that doesn't get deep in propagation theory?
>
> --
> Bob D. ND9B

Most of the newer ARRL Handbooks have a section it them that give the
differant bands and how far they are good for during the day and night.

For example:

3.5-4.0 MHz (80 m)

The lowest HF band is similar to 160 m in many

respects. Daytime absorption is significant, but not quite

as extreme as at 1.8 MHz. High-angle signals may

penetrate to the E and F layers. Daytime communication

range is typically limited to 400 km (250 mi) by groundwave

and skywave propagation. At night, signals are

often propagated halfway around the world. As at

1.8 MHz, atmospheric noise is a nuisance, making winter

the most attractive season for the 80-m DXer.

1473. Re: Propagation for Dummies

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 02:08:18 UTC
From: The Shadow <Repose@Zilch.com>
Message-ID: <lqGHi.130444$xx1.65831@newsfe09.phx>
Source record: 36248

"Bob D." <bobmgtd@insightbb.com> wrote in message
news:H_2dnc51Xdwgu3LbnZ2dnUVZ_gOdnZ2d@insightbb.com...
> I'm looking for a guide to "what bands are open when, and how far". I'd
> like to set up a schedule with a couple friends but I don't have a good
> feel for 'what band / what time'. Does anyone know of a good 'rule of
> thumb' reference that doesn't get deep in propagation theory?
>
> --
> Bob D. ND9B
This a simple straight forward primer on propagation By AE4RV
http://www.ae4rv.com/tn/propflash.htm

The Shadow Knows

1474. Re: Propagation for Dummies

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 06:36:35 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qkrue319j6r2rrop7gmj0ms74h3ivun451@4ax.com>
Source record: 36249

On Mon, 17 Sep 2007 21:16:30 -0400, "Bob D." <bobmgtd@insightbb.com>
wrote:

>Does anyone know of a good 'rule of thumb'
>reference that doesn't get deep in propagation theory?

Hi Bob,

Listen for 5 minutes every hour on each band you typically have an
opportunity to work a QSO.

Keep an activity log over a week to 10 days. Repeat this daily cycle
every 6-8 weeks over a year. Repeat this bi-monthly cycle every
couple of years for slightly more than a decade. You will have your
own rule of thumb.

Start now and you won't need theory or anyone else's book. If you
make a chart across time, you may see periodicities and become an
expert. They will conform in general to what may be found in the
books too - but your charts will be tailored for you (the hardest part
of theories, and the most useful bit of knowledge not found in books).

Even 10 days work will tell you more than a book or theory.

73's
Richard Clark, KB7QHC

1475. Re: Propagation for Dummies

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 07:12:50 UTC
From: Ralf Ballis <rb.news@arcor.de>
Message-ID: <46ef7a70$0$4530$9b4e6d93@newsspool3.arcor-online.net>
Source record: 36250

Bob D. Schrieffer:
> I'm looking for a guide to "what bands are open when, and how far". I'd like
> to set up a schedule with a couple friends but I don't have a good feel for
> 'what band / what time'. Does anyone know of a good 'rule of thumb'
> reference that doesn't get deep in propagation theory?
>

It's very complex to make a good prediction.
Seek for propagation software, like AREPS, ITS HF, etc. that's would a
little help.

Regards,

Ralf, DL2MRB

1476. Re: Trying to Identify??

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 07:24:02 UTC
From: Jeff <jeff@local.host>
Message-ID: <46ef7d3b$0$1341$834e42db@reader.greatnowhere.com>
Source record: 36251

"John Doe" <hgorden@adelphia.net> wrote in message
news:4q6dnVgxw7j7u3LbnZ2dnUVZ_ramnZ2d@comcast.com...
> Chesapeake Microwave
> MDL: 86-0142
> Freq: 4 - 8 Ghz
>
> SMA connector on 1 side of box & 4 SMA connectors on the other side of the
> aluminum box.
>
> I think that it might be some kind of combiner or single input and
> multi-output device.
>
> 73's
>

It is indeed a 4 to 1 splitter/combiner

73
Jeff

1477. Re: Ratio A/B

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 07:47:21 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46ef8280$0$18907$4c368faf@roadrunner.com>
Source record: 36252

"Jimmie D" <GFENDER@carolina.rr.com> wrote in message
news:46edaf2a$0$16513$4c368faf@roadrunner.com...
>I am trying to teach a test equipment class. In the course of explaning
>the purpose of the input A /input B ratio setting of a fequency counter I
>explained this as using an external time base where the counter will read
>events A per event B. I have been told I am wrong but so far noone who has
>said I was wrong cares to give a better explanation. I freely admit that I
>have never had call to use this feature of a frequency counter. The example
>that I gave was that if the output of a magnetic trannsducer that picked up
>pulses from a flywheel was coupled to A input then the proper time base
>could be calculated and applied to the B input so the display on the
>counter would be in RPM. Is this not correct?
>
>
> Jimmie
>

I am going to be replacing the 74141 nixie drivers. I thought as long as I
was in there I might replace the first 7490 decade counter. Is the 74LS90
better? T he reason I want to do this is the counter starts going haywire
if I put in more than a 30Mhz signal without switching over o the prescaler
input. I was thinking this should be good up to about 50Mhz.

Jimmie

Jimmie

1478. Re: Propagation for Dummies

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 08:51:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13ev4des20fl846@corp.supernews.com>
Source record: 36253

A good, easy to use, easy to understand, and free propagation program is available from http://www.qsl.net/w6elprop/. A google search on w6elprop produces links to a couple of tutorials on using it.

Roy Lewallen, W7EL
(not to be confused with Shel Shallon, W6EL who has generously made his W6ELProp program available at no cost)

1479. Re: Propagation for Dummies

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 13:28:39 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <XY2dncNqXKDRT3LbnZ2dnUVZ_rKtnZ2d@bright.net>
Source record: 36254

Here are some useful notes on W6EL's program:
http://www.mdxa.org/w6elprop.html

It is contended that the W6EL program only uses the MUFs at the end points
of the path. For paths of something like 7 Mm or more this can introduce
large errors. Even the old, old graphical techniques used ionospheric
properties along the path.

Ionospheric propagation is such an interesting subject that I am not able to
understand why ND9B would not wish to "get deep in(to) propagation theory."
The ARRL's Antenna book has a useful and easy-to-read section on HF
propagation.

73, Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"Roy Lewallen" <w7el@eznec.com> wrote in message
news:13ev4des20fl846@corp.supernews.com...
> A good, easy to use, easy to understand, and free propagation program is
> available from http://www.qsl.net/w6elprop/. A google search on w6elprop
> produces links to a couple of tutorials on using it.
>
> Roy Lewallen, W7EL
> (not to be confused with Shel Shallon, W6EL who has generously made his
> W6ELProp program available at no cost)

1480. Hustler G7-144 vs G6-144 vs dipole radiation pattern

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 14:18:10 UTC
From: Nate Bargmann <n0nb.DO.NOT.SPAM@ME.networksplus.net>
Message-ID: <pan.2007.09.18.14.18.10@ME.networksplus.net>
Source record: 36255

I'm curious whether anyone has run an NEC type of analysis on the Hustler G7-144, and/or the G6-144 antennas. I'd like a gain/pattern comparison to a 1/2 wave vertically oriented dipole. However, I can't find any manufacturer pattern plots to compare these antennas.

73, de Nate >>

--

"The optimist proclaims that we live in the best of all possible worlds, the pessimist fears this is true."

1481. Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 16:00:16 UTC
From: Tom Corker <tomcorker@bluebottle.com>
Message-ID: <1190131216.292927.135940@50g2000hsm.googlegroups.com>
Source record: 36256

Hi,

I'm new to amateur radio, and am looking to build my first antenna for
the 2m band. I intend to build the one at
http://www.qsl.net/iz7ath/web/02_brew/12_jpole/jp_eng.htm.
As this is my first, I have a couple of questions about it's
construction:

1) Can I use copper tubing instead of aluminium?
2) Are the tube diameters crucial?
3) The instructions seem to imply that I can use the longer of the
tubes to mount the antenna. Does this need to be insulated?
4) I'll be using the 2m band, max power 10 Watts, and a cable run of
no more than 20 meters. What sort of cable would be best fro the
feeder? (Ideally one that can be purchased from Maplin:
http://www.maplin.co.uk/Search.aspx?menuno=12276&MenuName=RF%20Cable&FromMenu=y&worldid=3&doy=18m9)

Thanks.

1482. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 16:52:05 UTC
From: Christian Treldal <chris@taarnkammeret.dk>
Message-ID: <pan.2007.09.18.16.52.05@taarnkammeret.dk>
Source record: 36257

Den Tue, 18 Sep 2007 09:00:16 -0700 skrev Tom Corker:

>
> 1) Can I use copper tubing instead of aluminium?
Yes 10 or 12mm o.d. plummers coppertubing and fittings makes a great j-
pole

http://www.n7qvc.com/amateur_radio/copper.html

This one works great

> 2) Are the tube diameters crucial?
No; but for all antennas wider material gives wider bandwith

> 3) The instructions seem to imply that I can use the longer of the tubes
> to mount the antenna. Does this need to be insulated?

yes, mount it on a plastictube from the plummer

> 4) I'll be using
> the 2m band, max power 10 Watts, and a cable run of no more than 20
> meters. What sort of cable would be best fro the feeder? (Ideally one
> that can be purchased from Maplin:
> http://www.maplin.co.uk/Search.aspx?menuno=12276&MenuName=RF%
20Cable&FromMenu=y&worldid=3&doy=18m9)

RG213 will do, RG58 are too lossy on vhf.
> Thanks.

--
Vy73 de OZ1GNN

Christian Treldal

1483. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 18:06:20 UTC
From: Tom Corker <tomcorker@bluebottle.com>
Message-ID: <1190138780.590886.289800@19g2000hsx.googlegroups.com>
Source record: 36258

On 18 Sep, 17:52, Christian Treldal <ch...@taarnkammeret.dk> wrote:
> Den Tue, 18 Sep 2007 09:00:16 -0700 skrev Tom Corker:
>
>
>
> > 1) Can I use copper tubing instead of aluminium?
>
> Yes 10 or 12mm o.d. plummers coppertubing and fittings makes a great j-
> pole
>
> http://www.n7qvc.com/amateur_radio/copper.html
>
> This one works great
>
> > 2) Are the tube diameters crucial?
>
> No; but for all antennas wider material gives wider bandwith
>
> > 3) The instructions seem to imply that I can use the longer of the tubes
> > to mount the antenna. Does this need to be insulated?
>
> yes, mount it on a plastictube from the plummer
>
> > 4) I'll be using
> > the 2m band, max power 10 Watts, and a cable run of no more than 20
> > meters. What sort of cable would be best fro the feeder? (Ideally one
> > that can be purchased from Maplin:
> >http://www.maplin.co.uk/Search.aspx?menuno=12276&MenuName=RF%
>
> 20Cable&FromMenu=y&worldid=3&doy=18m9)
>
> RG213 will do, RG58 are too lossy on vhf.
>
> > Thanks.
>
> --
> Vy73 de OZ1GNN
>
> Christian Treldal

Thanks for that. I'm thinking about going with the design you gave.
I'm also guessing I'll need to tune the antenna using an SWR meter. A
lot of the ones on ebay (UK) are listed as CB SWR meters. Will these
be OK for the 2m band?

1484. Re: Hustler G7-144 vs G6-144 vs dipole radiation pattern

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 18:43:52 UTC
From: dplatt@radagast.org
Message-ID: <8si5s4-1b1.ln1@radagast.org>
Source record: 36259

In article <pan.2007.09.18.14.18.10@ME.networksplus.net>,
Nate Bargmann <n0nb.DO.NOT.SPAM@ME.networksplus.net> wrote:

>I'm curious whether anyone has run an NEC type of analysis on the Hustler
>G7-144, and/or the G6-144 antennas. I'd like a gain/pattern comparison
>to a 1/2 wave vertically oriented dipole. However, I can't find any
>manufacturer pattern plots to compare these antennas.

I put together a couple of NEC models for the G7-144 a year or two ago. If I recall correctly, this antenna is composed of three 5/8-wave radiators in a collinear arrangement (stacked one above another) separated by relatively short inductive loading/phasing coils. It has quarter-wave radials at the bottom and is fed at the base through a tapped coil.

I did two different models - one using shorted transmission-line stubs as the phasing elements, and another using lumped inductances. With the stub lengths, and the inductance values tweaked to give the correct current-phase relationships in the 5/8-wave radiating sections, the two models produced almost indistinguishable results in the pattern analysis, and a gain figure which matched the manufacturer's claims quite well. I can't claim that the models are precisely correct, but I'd guess that they're fairly close.

The pattern seemed reasonably clean... most of the energy went straight out towards the horizon. There were minor lobes upwards and downwards at an angle of around 45 degrees, as one would expect from a 5/8-wave radiator. I didn't see any systematic "squint" (up-tilt or down-tilt) in the pattern. The "donut" of the pattern was significantly shallower than that of a half-wave reference dipole... not s surprise.

I added a random wire down from the feedpoint to simulate the "RF on the outside of the coax or on the mast" issue, and found that there was little current and little effect on the pattern... according to the models, at least, the quarter-wave radials do a pretty effective job in decoupling the antenna from the mast and feedline.

I compared these results against those for another antenna design I've been considering for our repeater - a pair of "plumber's delight" copper-pipe 5/4-wave extended double Zepp antennas, stacked one above the other (about a quarter-wave separating the tips of their inner arms), fed in phase. The results were roughly comparable.

I've got the models on my laptop PC at home, I think... if I can find 'em I'll email them, and perhaps some results plots to you.

The biggest concern I have about the G7-144 isn't its pattern - it's some aspects of its construction. The one we're using went bongo after a few years up in the weather - the repeater began suffering from extremely severe desense - it was so bad as to render the repeater unusable unless you were within a mile or so of it. We temporarily swapped the Hustler for a simple J-pole and got back most of the performance.

When we tore down the G7-144 we found that the bottom end of the base-matching/feed coil was high-Z from ground. The construction of the antenna base depends on a heavy-gauge press fitting between two sections of aluminum to establish the connection between the base of the coil and the N connector, and about five years of weathering (in a fairly mild climate) had led to enough oxidation to allow the connection to go open-circuit at DC! I believe that there were also some connections which were done with ring terminals and rivets. The antenna actually worked, in the sense that it transmitted and showed a low SWR, but there was enough micro-arcing and rectification taking place in the oxidized connections to create plenty of broadband noise which was swamping the receiver and leading to many dB of desensitization.

Our chief metalworking guy tore the whole thing apart, and rebuilt the base with a better N connector and a pair of soldered connections between the coil base and the ground shell of the N connector. He also cleaned up all of the sliding-tubing connections between the radiators and phasing coils, roughened them up a bit, gooped them with a conductive anti-oxidant compound, re-fit and re-tuned them, then drilled through the tubing and riveted them together, and then used heat-shrink tubing over all of the phasing-coil connections. I think he believes in wearing suspenders, a belt, *and* duct tape :-)

We put it back up, and found that the desense was down to undetectable levels. It's been up in the air for 18 months now, with nary a problem.

We're going to have to move our antenna tower in a few years, and at that point we'll probably retire the G7-144 and replace it with either a stacked pair of EDZ antennas (homebrew) or a stacked folded dipole system (commercial). Both of the candidate designs use fully-soldered or fully-welded radiator construction... they're DC-grounded and would be free of sliding or press-fit connections which could oxidize and degrade over time.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

1485. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 20:41:33 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <KridnfnWzfgAqm3bnZ2dnUVZ8q6unZ2d@pipex.net>
Source record: 36260

> Thanks for that. I'm thinking about going with the design you gave.
> I'm also guessing I'll need to tune the antenna using an SWR meter. A
> lot of the ones on ebay (UK) are listed as CB SWR meters. Will these
> be OK for the 2m band?
==========
Not really , go for a proper SWR meter suitable for freqs up to 150 MHz
Even better ,buy or borrow an antenna analyser . The MFJ259 is rather
popular ,but there are others as well.

Frank GM0CSZ / KN6WH

1486. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 21:05:27 UTC
From: Alan WA4SCA <ALANBIDDLE70@YAHOO.COM>
Message-ID: <41f0f31sqfn5j3gjd6a9uu4d92uv8q9vm5@4ax.com>
Source record: 36261

Tom,

Most of those CB SWR meters are good for HF and probably 6 meters or
so. My experience is that they are highly inaccurate at best, and
often completely unusable on 2 meters. I lend my Bird wattmeter out
frequently for people doing installations because of this.

Of course, there are so many units out there it is impossible to say
with certainty that they won't work, but that's what to expect. You
don't what an additional unknown in building up a new antenna.

--
Alan
WA4SCA

1487. Random wire Receiver antenna good enough?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 22:05:15 UTC
From: jwbsolutions@gmail.com
Message-ID: <1190153115.734806.232720@y27g2000pre.googlegroups.com>
Source record: 36262

Hello,

I have just gotten my radio license and someone gave me an old hammarlund receiver that hadn't been used in over 25 years. I used a variac to bring up the power slowly, because I was told that the capacitors needed to be reconditioned. Everything seemed to work fine and I was able to pull in some transmissions with a random wire antenna. I don't have a transmitter yet, so I am hoping to just use a longer random wire antenna, laid along the attic until I can get money together etc. My question is probably dumb, but I was wondering if there is an "optimal length" for a random wire antenna for hf?

THanks for any help you can provide,

Joel Hainley
www.hamtesting.com

1488. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 23:09:05 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <hd26s4-qum.ln1@p400bob.personal.cox.net>
Source record: 36264

Hi Tom

If you really feel like not spending money on a SWR meter you might like to try the horrible but simple approach of making one out of a piece of RG213 with the PVC stripped off, and thin teflon wire pushed under the shield in the same mechanical arrangement of a SWR meter. A couple of shottkeys, capacitors and resistors and you can read VSWR on a multimeter!

I'd even venture to suggest that replacing the line section in a CB meter with this arrangement would yield a much more useful higher frequency device. (And use BNC's or N sockets...)

I can see you all cringing!

Cheers Bob W5/VK2YQA

Tom Corker wrote:

>> Christian Treldal
>
> Thanks for that. I'm thinking about going with the design you gave.
> I'm also guessing I'll need to tune the antenna using an SWR meter. A
> lot of the ones on ebay (UK) are listed as CB SWR meters. Will these
> be OK for the 2m band?
>

1489. Re: Propagation for Dummies

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-18 23:49:36 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <kuZHi.97225$Mu5.46077@newsfe15.phx>
Source record: 36263

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:qkrue319j6r2rrop7gmj0ms74h3ivun451@4ax.com...
> On Mon, 17 Sep 2007 21:16:30 -0400, "Bob D." <bobmgtd@insightbb.com>
> wrote:

>
> Even 10 days work will tell you more than a book or theory.
>
> 73's
> Richard Clark, KB7QHC

Amen! I used to think anything above about 10 MHz went away soon after sunset. It was some erroneous "theory" that I had absorbed. In fact, some of my favorite 20m contacts have happened hours after sunset ... and toward places to the East, to boot!

1490. Re: Hustler G7-144 vs G6-144 vs dipole radiation pattern

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-19 00:14:39 UTC
From: Nate Bargmann <n0nb.DO.NOT.SPAM@ME.networksplus.net>
Message-ID: <pan.2007.09.19.00.14.25@ME.networksplus.net>
Source record: 36265

Thanks Dave.

That was an excellent post. It's interesting that I've read testimonials on eHam and other web pages that claim 15 to 20 years of service with the G7-144 with no complaints. Then there are some that have had some issues.

The G6-144 is a bit more attractive to me right now due to the lower price and being about 2/3 of the length of the G7. Interestingly, the G6 literature (available at http://www.dxengineering.com) says, "FCC accepted for Repeater application at 6db gain based on EIA Standard RS-239: gain compared to 1/2 wave dipole." I've never heard of antennas being "FCC accepted for Repeater application" before. So now I'm curious whether the G6 may be more rugged than the G7. At the very least there won't be so much aluminum swinging in the breeze.

I am looking for antenna for our repeater. We tried pressing a commercial antenna tuned for 155 MHz into service, but it just hasn't worked out as we have severe desense. Its mounting is also far from optimal. The calculated SWR at the antenna is approximately 1.8:1.

We were checking things over today and everything looks good when the duplexer is terminated into a 50 ohm load, but varying levels of noise exist at the RX frequency when the antenna is connected. It is definitely our system as the spectrum is clear when the repeater TX is off. It was too windy today to climb to the top of the grain elevator leg the antenna is on to check at the end of the hardline with a wattmeter and dummy load.

I like the idea of the G6 as it appears easy to handle and easy to mount. We are limited by the framework of the structure and we have to avoid having anything that would get in the way of the employees or jeopardize their safety. Also, it needs to be safe for us to work with as well.

The G6 appears to be two 5/8 wave radiators fed with Hustler's fiberglass encased coil assembly. I have seen that the antenna is about 10 feet tall, weighs about 7 pounds, and has a surface area of 1.4 sq ft. We can mount a mast easily on the structure that will support a lightweight gain antenna like the G6. A DB-224 would be nice, but it requires considerably more in the way of mounting and manpower resources to do it correctly.

Any suggestions are appreciated.

73, de Nate >>

--

"The optimist proclaims that we live in the best of all possible worlds,
the pessimist fears this is true."

1491. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-19 01:59:45 UTC
From: Jim-NN7K <nn7kexk7zfg@sbcglobal.net>
Message-ID: <7s%Hi.9087$z_5.1789@nlpi069.nbdc.sbc.com>
Source record: 36268

Must say that I second this, as the "sampleing" in MANY swr meters not
only DON'T read accurately, at VHF, but actually induce a "Impedence
Mis-Match" (and gives you a FALSE reading , at VHF) ! In fact, have
seen "Flat antennas, show some hideous SWR's " ! And, tho length is
of the antenna element is
the determining factor, you need a good meter if you want to minimize
the swr. As to insulating the J-Pole, BELOW the 2 vertical elements,
this shouldn't be necessary- and - keep in mind that this antenna wants
a Balanced feedline-, so, that your coax WON'T radiate! BUT- as you
probably will use (unbalanced) coax (No BALUN) that your coax becomes
PART of the antenna system ! But this should not present itself
as much of a problem, unless it lets RF into the RIG/Power Supply in
a quantity to cause problems in those devices! As to coax, use the
lowest loss you can afford, tho, again, in this instance, will mean
LITTLE! At 20 foot length, RG 58 should work fine! Just build it, get a
fairly good match to keep the rig happy, and enjoy! Jim NN7K

Alan WA4SCA wrote:
> Tom,
>
> Most of those CB SWR meters are good for HF and probably 6 meters or
> so. My experience is that they are highly inaccurate at best, and
> often completely unusable on 2 meters. I lend my Bird wattmeter out
> frequently for people doing installations because of this.
>
> Of course, there are so many units out there it is impossible to say
> with certainty that they won't work, but that's what to expect. You
> don't what an additional unknown in building up a new antenna.
>
>
> --
> Alan
> WA4SCA

1492. Re: Random wire Receiver antenna good enough?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-19 02:00:14 UTC
From: "Joe3301955@aol.com" <Joe3301955@aol.com>
Message-ID: <1190167214.617840.206120@g4g2000hsf.googlegroups.com>
Source record: 36266

75 foot is the random number my son uses everytime. He does use an
external automatic antenna tuner for his radio, and has made some
incredible contacts.

Check out http://home.earthlink.net/~w0ipl/random-l.htm

On Sep 18, 6:05 pm, jwbsoluti...@gmail.com wrote:
> Hello,
>
> I have just gotten my radio license and someone gave me an old
> hammarlund receiver that hadn't been used in over 25 years. I used a
> variac to bring up the power slowly, because I was told that the
> capacitors needed to be reconditioned. Everything seemed to work fine
> and I was able to pull in some transmissions with a random wire
> antenna. I don't have a transmitter yet, so I am hoping to just use a
> longer random wire antenna, laid along the attic until I can get money
> together etc. My question is probably dumb, but I was wondering if
> there is an "optimal length" for a random wire antenna for hf?
>
> THanks for any help you can provide,
>
> Joel Hainleywww.hamtesting.com

1493. Re: Hustler G7-144 vs G6-144 vs dipole radiation pattern

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-19 02:02:11 UTC
From: dplatt@radagast.org
Message-ID: <3ic6s4-353.ln1@radagast.org>
Source record: 36267

In article <pan.2007.09.19.00.14.25@ME.networksplus.net>,
Nate Bargmann <n0nb.DO.NOT.SPAM@ME.networksplus.net> wrote:

>Thanks Dave.
>
>That was an excellent post. It's interesting that I've read testimonials
>on eHam and other web pages that claim 15 to 20 years of service with the
>G7-144 with no complaints. Then there are some that have had some issues.

The luck of the draw, I suppose?

>The G6-144 is a bit more attractive to me right now due to the lower
>price and being about 2/3 of the length of the G7. Interestingly, the G6
>literature (available at http://www.dxengineering.com) says, "FCC
>accepted for Repeater application at 6db gain based on EIA Standard
>RS-239: gain compared to 1/2 wave dipole." I've never heard of antennas
>being "FCC accepted for Repeater application" before.

I imagine that there may be some such regulations for some of the
commercial or public-safety bands? Minimum or maximum gains allowed,
or cleanliness-of-pattern perhaps?

>I am looking for antenna for our repeater. We tried pressing a
>commercial antenna tuned for 155 MHz into service, but it just hasn't
>worked out as we have severe desense. Its mounting is also far from
>optimal. The calculated SWR at the antenna is approximately 1.8:1.
>
>We were checking things over today and everything looks good when the
>duplexer is terminated into a 50 ohm load, but varying levels of noise
>exist at the RX frequency when the antenna is connected. It is
>definitely our system as the spectrum is clear when the repeater TX is
>off. It was too windy today to climb to the top of the grain elevator
>leg the antenna is on to check at the end of the hardline with a
>wattmeter and dummy load.

It sure sounds as if you've got a less-than-good connection somewhere.

We had similar problems after a while with one of our "American
Legion" J-pole antennas, which use an all-aluminum construction. The
radiator and matching-arm rods were originally mounted with
set-screws, but on this particular antenna the connection had been
reinforced with a spot-weld. Due to flexure of the rods in the
breeze, the weld eventually became brittle and cracked... and the
antenna immediately exhibited severe desense due to broadband-noise
generation in the cracked junction.

>Any suggestions are appreciated.

We're looking at some of Telewave's antennas, which I believe are similar to the DB-224 in their basic design approach.

I'd also suggest that you take a look at the copper-pipe EDZ design at http://www.tcarc.ca/public/2mdez.php, which would have gain quite similar to the G6-144, I think.

The folks who run this page seem to like this antenna for repeater service. Since it's a grounded, fully-soldered design (you can solder the balun-attachment points to the matching stub) it ought to be quite free of desense-causing corrosion/micro-arcing points.

I built one of these for our repeater system, scaled down for use as a remote-linking antenna for the 440 band. Seems to have worked out well so far. The only thing I'd do differently the next time I build one, is wait to figure out the actual shorting-stub and balun attachment points until the antenna is actually in place on the tower. I tuned it in a free-space situation, and the presence of the tower de-tuned it a bit (enough to notice on a meter, not enough to matter in practice).

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

1494. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-19 09:43:19 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <GOWdnSikLtZOc23bnZ2dnUVZ8smgnZ2d@pipex.net>
Source record: 36269

> In the US, copper water pipe comes in three grades, K, L and M, in
> increasing order of quality/cost. We also have "DWV" copper pipe for drains
> and vents (non-pressure applications, I guess). Same over there?
==========
Question : Would any of the above grades of copper pipe affect the RF
radiation characteristics of the antenna ?

Frank GM0CSZ / KN6WH

1495. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-19 10:01:02 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <qq2dnYluw_xmb23bnZ2dneKdnZylnZ2d@pipex.net>
Source record: 36270

Bob Bob wrote:
> Hi Tom
>
> If you really feel like not spending money on a SWR meter you might like
> to try the horrible but simple approach of making one out of a piece of
> RG213 with the PVC stripped off, and thin teflon wire pushed under the
> shield in the same mechanical arrangement of a SWR meter. A couple of
> shottkeys, capacitors and resistors and you can read VSWR on a multimeter!
>
> I'd even venture to suggest that replacing the line section in a CB
> meter with this arrangement would yield a much more useful higher
> frequency device. (And use BNC's or N sockets...)
==========
Instead of using RG213 coax I would use a short piece of 75 Ohms coax
(here in the UK used for sat dish feeder) with air gap dielectric .
The 10 mm (3/8 inch) OD variety is particularly suitable .
Without removing the outer sheathing a bare or teflon insulated wire can
be readily pushed through.

Frank GM0CSZ / KN6WH

1496. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-19 11:03:12 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <46F101F0.2010509@suddenlink.net>
Source record: 36271

Frank

Wouldn't you be concerned over presenting a slight Z bump of a 75 ohm
piece of material? I'll admit I cant see it making a huge difference,
but as one is building test gear it might pay to be pedantic.

I'd also be concerned that pushing wire into the air gap would lower the
Z in an unpredictable way. Pushing it just under the shield keeps it at
a reasonably fixed dielectric spacing from the inner conductor.

If it works however, then I won't argue!

Bob VK2YQA

Highland Ham wrote:
> Instead of using RG213 coax I would use a short piece of 75 Ohms coax
> (here in the UK used for sat dish feeder) with air gap dielectric .
> The 10 mm (3/8 inch) OD variety is particularly suitable .
> Without removing the outer sheathing a bare or teflon insulated wire can
> be readily pushed through.

1497. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-19 12:04:25 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <HfWdnWKbatR4kmzbnZ2dnUVZ8tSdnZ2d@pipex.net>
Source record: 36272

Bob Bob wrote:
> Frank
>
> Wouldn't you be concerned over presenting a slight Z bump of a 75 ohm
> piece of material? I'll admit I cant see it making a huge difference,
> but as one is building test gear it might pay to be pedantic.
>
> I'd also be concerned that pushing wire into the air gap would lower the
> Z in an unpredictable way. Pushing it just under the shield keeps it at
> a reasonably fixed dielectric spacing from the inner conductor.
>
> If it works however, then I won't argue!
==========
I'll check the anticipated 'bump' with the MFJ259B analyser.
First connected to a high quality professional dummy load good for freqs
to 2 GHz (ex cellnet industry),thereafter with the homebrew SWR sensor
inserted,testing in 2 stages : First with just the short piece of 75
ohms coax (obviously having the braid connected to chassis at one end
only) ;Secondly with the wire pushed into the air gap.

This is a useful and interesting NG thread.

Frank GM0CSZ / KN6WH

1498. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-19 13:54:45 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fcr9n5$1678$1@f04n12.cac.psu.edu>
Source record: 36273

Highland Ham wrote:
>> In the US, copper water pipe comes in three grades, K, L and M, in
>> increasing order of quality/cost. We also have "DWV" copper pipe for
>> drains
>> and vents (non-pressure applications, I guess). Same over there?
> ================
> Question : Would any of the above grades of copper pipe affect the RF
> radiation characteristics of the antenna ?

The answer depends upon whether you mean an effect that is noticible or
not. ;^)

73 de Mike KB3EIA -

1499. Re: Random wire Receiver antenna good enough?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-19 16:12:02 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <yOSdnbd0-Zap12zbnZ2dneKdnZydnZ2d@comcast.com>
Source record: 36274

<jwbsolutions@gmail.com> wrote in message
news:1190153115.734806.232720@y27g2000pre.googlegroups.com...
> Hello,
>
> I have just gotten my radio license and someone gave me an old
> hammarlund receiver that hadn't been used in over 25 years. I used a
> variac to bring up the power slowly, because I was told that the
> capacitors needed to be reconditioned. Everything seemed to work fine
> and I was able to pull in some transmissions with a random wire
> antenna. I don't have a transmitter yet, so I am hoping to just use a
> longer random wire antenna, laid along the attic until I can get money
> together etc. My question is probably dumb, but I was wondering if
> there is an "optimal length" for a random wire antenna for hf?
>
> THanks for any help you can provide,
>
> Joel Hainley
> www.hamtesting.com
>
At one time, at least, the ARRL Handbook recommended something like 95 feet.
Way too long is better than way too short. For instance, my 75 meter dipole
receives OK on 20 meters. The 20 meter antenna is useless on 75.

Tam/WB2TT

1500. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-19 16:22:20 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <8eidnc1W7L3D0WzbRVnyjwA@pipex.net>
Source record: 36275

Michael Coslo wrote:
> Highland Ham wrote:
>>> In the US, copper water pipe comes in three grades, K, L and M, in
>>> increasing order of quality/cost. We also have "DWV" copper pipe for
>>> drains
>>> and vents (non-pressure applications, I guess). Same over there?
>> ================
>> Question : Would any of the above grades of copper pipe affect the RF
>> radiation characteristics of the antenna ?
>
>
> The answer depends upon whether you mean an effect that is noticible
> or not. ;^)
==
My question is directed to the different grades K,L and M ,whether any
particular grade would give better RF radiation performance .
It could be that the grade with the highest copper content gives the
best performance ,although I doubt that it will be measurable.
J-pole antennas I am familiar with are all made of aluminium,but copper
is of course better long term in an outdoor environment and electrical
contacts are reliable following soldering.

Frank GM0CSZ / KN6WH

1501. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-19 16:29:52 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <P7cli.70349$U24.46505@bignews5.bellsouth.net>
Source record: 36276

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:8eidnc1W7L3D0WzbRVnyjwA@pipex.net...
> Michael Coslo wrote:
>> Highland Ham wrote:
>>>> In the US, copper water pipe comes in three grades, K, L and M, in
>>>> increasing order of quality/cost. We also have "DWV" copper pipe for
>>>> drains
>>>> and vents (non-pressure applications, I guess). Same over there?
>>> ================
>>> Question : Would any of the above grades of copper pipe affect the RF
>>> radiation characteristics of the antenna ?
>>
>>
>> The answer depends upon whether you mean an effect that is noticible
>> or not. ;^)
> ==
> My question is directed to the different grades K,L and M ,whether any
> particular grade would give better RF radiation performance .
> It could be that the grade with the highest copper content gives the best
> performance ,although I doubt that it will be measurable.
> J-pole antennas I am familiar with are all made of aluminium,but copper is
> of course better long term in an outdoor environment and electrical
> contacts are reliable following soldering.
>
> Frank GM0CSZ / KN6WH
>

I have made emergency VHF antennas from a hunk of 2x4 and two pieces of 3/8" aluminum grounding wire. Then I get a piece of mini8x (any 50 ohm coax will do), skin back the insulation until I have enough material to solder an alligator clip onto the center lead and one onto the equi-distant piece of shielding. I then drill two 3/8's diameter holes approximately 4" apart in the hunk of 2x4. Calculate the 1/2 wavelenth of the band you wish to operate on. Cut a hunk of 3/8" grounding wire to that length, straighten and then insert it into one of the previously drilled 3/8" holes in the hunk of 2x4. Cut another hunk of 3/8" aluminum grounding wire to exactly one half the length of the first piece and then insert it into the remaining hole in the 2x4.

Connect the coax to your VHF rig via the PL-259 that you soldered onto the end opposite the end with the alligator clips and plug it into your rig. Clip the alligator clip fastened to the center coax conductor to the longest piece of 3/8" wire (half wavelength) and the shield connected alligator clip

to the shorter wire protruding from the 2x4. Adjust the height of the two clips (should be even with one another) for the lowest SWR. Voila! You're on the air with an instant J-Pole antenna.

All of this can be enclosed in PVC plastic piping for use outdoors.

Ed, NM2K

1502. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-19 18:32:53 UTC
From: dplatt@radagast.org
Message-ID: <lj68s4-gtf.ln1@radagast.org>
Source record: 36277

In article <8eidnc1W7L3D0WzbRVnyjwA@pipex.net>,
Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

>My question is directed to the different grades K,L and M ,whether any
>particular grade would give better RF radiation performance .
>It could be that the grade with the highest copper content gives the
>best performance ,although I doubt that it will be measurable.

My recollection is that the basic difference between the various grades is the thickness of the copper walls. The thicker-walled pipe is what's preferred for outdoor/buried use and/or higher pressures (e.g. use on the supply side of a house's water-pressure regulator).

RF current flows only through the skin of a conductor... it doesn't penetrate very far into the body. One web calculator I found says that the skin depth of a 144 MHz signal in copper is around 200 micro-inches, or 1/5000 of an inch. If the tubing wall is much thicker than this, the additional thickness will have no significant benefit in reducing resistive losses.

Since even the thinnest-walled (Schedule M) copper pipe has a wall thickness which is about a hundred times more than the skin depth, there's no electrical benefit to using thicker-walled tubing (Schedule K or L).

Unless there's some mechanical reason to want to use the heavier-schedule tubing, I'd just stick with Schedule M - it's lighter, less expensive, and should be plenty stiff and strong for most applications.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will boycott any company which has the gall to send me such ads!

1503. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-19 20:53:30 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13f332lfrf28k2e@corp.supernews.com>
Source record: 36278

Highland Ham wrote:
> Question : Would any of the above grades of copper pipe affect the RF
> radiation characteristics of the antenna ?

No.

Roy Lewallen, W7EL

1504. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-19 21:34:37 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1190237677.217849.186480@19g2000hsx.googlegroups.com>
Source record: 36279

On Sep 19, 9:29 am, "Ed Cregger" <ecreg...@bellsouff.net> wrote:
> "Highland Ham" <abcgm0csz.kn6wh...@dsl.pipex.com> wrote in message
>
> news:8eidnc1W7L3D0WzbRVnyjwA@pipex.net...
>
>
>
> > Michael Coslo wrote:
> >> Highland Ham wrote:
> >>>> In the US, copper water pipe comes in three grades, K, L and M, in
> >>>> increasing order of quality/cost. We also have "DWV" copper pipe for
> >>>> drains
> >>>> and vents (non-pressure applications, I guess). Same over there?
> >>> ================
> >>> Question : Would any of the above grades of copper pipe affect the RF
> >>> radiation characteristics of the antenna ?
>
> >> The answer depends upon whether you mean an effect that is noticible
> >> or not. ;^)
> > ==
> > My question is directed to the different grades K,L and M ,whether any
> > particular grade would give better RF radiation performance .
> > It could be that the grade with the highest copper content gives the best
> > performance ,although I doubt that it will be measurable.
> > J-pole antennas I am familiar with are all made of aluminium,but copper is
> > of course better long term in an outdoor environment and electrical
> > contacts are reliable following soldering.
>
> > Frank GM0CSZ / KN6WH
>
> -------------
>
> I have made emergency VHF antennas from a hunk of 2x4 and two pieces of 3/8"
> aluminum grounding wire. Then I get a piece of mini8x (any 50 ohm coax will
> do), skin back the insulation until I have enough material to solder an
> alligator clip onto the center lead and one onto the equi-distant piece of
> shielding. I then drill two 3/8's diameter holes approximately 4" apart in
> the hunk of 2x4. Calculate the 1/2 wavelenth of the band you wish to operate
> on. Cut a hunk of 3/8" grounding wire to that length, straighten and then
> insert it into one of the previously drilled 3/8" holes in the hunk of 2x4.
> Cut another hunk of 3/8" aluminum grounding wire to exactly one half the
> length of the first piece and then insert it into the remaining hole in the
> 2x4.
>

> Connect the coax to your VHF rig via the PL-259 that you soldered onto the
> end opposite the end with the alligator clips and plug it into your rig.
> Clip the alligator clip fastened to the center coax conductor to the longest
> piece of 3/8" wire (half wavelength) and the shield connected alligator clip
> to the shorter wire protruding from the 2x4. Adjust the height of the two
> clips (should be even with one another) for the lowest SWR. Voila! You're on
> the air with an instant J-Pole antenna.
>
> All of this can be enclosed in PVC plastic piping for use outdoors.
>
> Ed, NM2K

Normally, a J-pole has parallel conductors at the bottom 1/4 wavelength, with one of the conductors extending above that 1/4 wave section for an additional 1/2 wavelength above that. That would be a 3/4 wave piece of wire and a 1/4 wave piece of wire. If I'm reading your description correctly, you're describing an antenna in which there's the 1/4 wave of parallel conductors, but then only 1/4 wave above that of the "unaccompanied" part of the half-wave piece. Also, do you not connect the two pieces of wire together at the end?

I've seen J-pole designs fed at the bottom end, and I've seen them with the bottom end shorted and the feed line tapped up on the parallel section, but haven't heard of one fed tapped up on the parallel section without the bottom shorted.

Cheers,
Tom

1505. Re: Random wire Receiver antenna good enough?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-19 23:42:08 UTC
From: merlin-7 <merlin-7@sc.rr.com>
Message-ID: <46f1b454$0$18927$4c368faf@roadrunner.com>
Source record: 36280

```
"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
news:yOSdnbd0-Zap12zbnZ2dneKdnZydnZ2d@comcast.com...
>
> <jwbsolutions@gmail.com> wrote in message
> news:1190153115.734806.232720@y27g2000pre.googlegroups.com...
> > Hello,
> >
> > I have just gotten my radio license and someone gave me an old
> > hammarlund receiver that hadn't been used in over 25 years. I used a
> > variac to bring up the power slowly, because I was told that the
> > capacitors needed to be reconditioned. Everything seemed to work fine
> > and I was able to pull in some transmissions with a random wire
> > antenna. I don't have a transmitter yet, so I am hoping to just use a
> > longer random wire antenna, laid along the attic until I can get money
> > together etc. My question is probably dumb, but I was wondering if
> > there is an "optimal length" for a random wire antenna for hf?
> >
> > THanks for any help you can provide,
> >
> > Joel Hainley
> > www.hamtesting.com
> >
> At one time, at least, the ARRL Handbook recommended something like 95
feet.
> Way too long is better than way too short. For instance, my 75 meter
dipole
> receives OK on 20 meters. The 20 meter antenna is useless on 75.
>
> Tam/WB2TT
>
It is always better to be to long than to short...
```

1506. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-20 00:48:32 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <krjIi.98546$jH3.52091@bignews6.bellsouth.net>
Source record: 36281

"K7ITM" <k7itm@msn.com> wrote in message
news:1190237677.217849.186480@19g2000hsx.googlegroups.com...
> On Sep 19, 9:29 am, "Ed Cregger" <ecreg...@bellsouff.net> wrote:
>> "Highland Ham" <abcgm0csz.kn6wh...@dsl.pipex.com> wrote in message
>>
>> news:8eidnc1W7L3D0WzbRVnyjwA@pipex.net...
>>
>>
>>
>> > Michael Coslo wrote:
>> >> Highland Ham wrote:
>> >>>> In the US, copper water pipe comes in three grades, K, L and M, in
>> >>>> increasing order of quality/cost. We also have "DWV" copper pipe
>> >>>> for
>> >>>> drains
>> >>>> and vents (non-pressure applications, I guess). Same over there?
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>> >>> Question : Would any of the above grades of copper pipe affect the RF
>> >>> radiation characteristics of the antenna ?
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>> >> The answer depends upon whether you mean an effect that is
>> >> noticible
>> >> or not. ;^)
>> > ==
>> > My question is directed to the different grades K,L and M ,whether any
>> > particular grade would give better RF radiation performance .
>> > It could be that the grade with the highest copper content gives the
>> > best
>> > performance ,although I doubt that it will be measurable.
>> > J-pole antennas I am familiar with are all made of aluminium,but copper
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>> > of course better long term in an outdoor environment and electrical
>> > contacts are reliable following soldering.
>>
>> > Frank GM0CSZ / KN6WH
>>
>> -------------
>>
>> I have made emergency VHF antennas from a hunk of 2x4 and two pieces of
>> 3/8"
>> aluminum grounding wire. Then I get a piece of mini8x (any 50 ohm coax
>> will
>> do), skin back the insulation until I have enough material to solder an
>> alligator clip onto the center lead and one onto the equi-distant piece

>> of
>> shielding. I then drill two 3/8's diameter holes approximately 4" apart
>> in
>> the hunk of 2x4. Calculate the 1/2 wavelenth of the band you wish to
>> operate
>> on. Cut a hunk of 3/8" grounding wire to that length, straighten and then
>> insert it into one of the previously drilled 3/8" holes in the hunk of
>> 2x4.
>> Cut another hunk of 3/8" aluminum grounding wire to exactly one half the
>> length of the first piece and then insert it into the remaining hole in
>> the
>> 2x4.
>>
>> Connect the coax to your VHF rig via the PL-259 that you soldered onto
>> the
>> end opposite the end with the alligator clips and plug it into your rig.
>> Clip the alligator clip fastened to the center coax conductor to the
>> longest
>> piece of 3/8" wire (half wavelength) and the shield connected alligator
>> clip
>> to the shorter wire protruding from the 2x4. Adjust the height of the two
>> clips (should be even with one another) for the lowest SWR. Voila! You're
>> on
>> the air with an instant J-Pole antenna.
>>
>> All of this can be enclosed in PVC plastic piping for use outdoors.
>>
>> Ed, NM2K
>
> Normally, a J-pole has parallel conductors at the bottom 1/4
> wavelength, with one of the conductors extending above that 1/4 wave
> section for an additional 1/2 wavelength above that. That would be a
> 3/4 wave piece of wire and a 1/4 wave piece of wire. If I'm reading
> your description correctly, you're describing an antenna in which
> there's the 1/4 wave of parallel conductors, but then only 1/4 wave
> above that of the "unaccompanied" part of the half-wave piece. Also,
> do you not connect the two pieces of wire together at the end?
>
> I've seen J-pole designs fed at the bottom end, and I've seen them
> with the bottom end shorted and the feed line tapped up on the
> parallel section, but haven't heard of one fed tapped up on the
> parallel section without the bottom shorted.
>
> Cheers,
> Tom
>

Try it, just as I described it. It works and works well.

No, the bottoms are not connected, but there is a version that works with that connection.

Ed Cregger, NM2K

1507. For Sale: SGC Automatic Antenna Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-20 00:52:26 UTC
From: W7GSA <iamw7gsa@gmail.com>
Message-ID: <1190249546.019719.105990@y42g2000hsy.googlegroups.com>
Source record: 36282

I have a Brand NEW SGC MAC-200 200 watt Automatic Antenna Tuner I bought for a project a couple months ago. The project was canceled and the tuner was never used.

This is a 200 watt Automatic Antenna Tuner that has inputs for 5 antennas. The tuner will either automatically find the best antenna or you can switch the antennas manually. The unit is about two months old and the one year warranty is still in effect. The unit requires a small 13.8 vdc power source. I will find one and include it at no extra cost.

This is a great companion for the SG-2000 or the SG-2020 transceivers. Click on this link for more information on this unit - http://sgcworld.com/MACProductPage.html - .

I paid about $269 for it and I will sell it for $239 plus 9.85 shipping in the lower 48 states. Alaska, Hawaii and International shipping is more. It comes in the original box with the manual. Please contact me at: - iamw7gsa@gmail.com - .

Thanks, Bill.

1508. Re: Random wire Receiver antenna good enough?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-20 02:26:05 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnff3mht.2nv9.bit-bucket@shell.config.com>
Source record: 36283

On Wed, 19 Sep 2007 19:42:08 -0400, merlin-7 wrote:
> "Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote:
>> <jwbsolutions@gmail.com> wrote:
>> >
>> > I have just gotten my radio license and someone gave me an old
>> > hammarlund receiver that hadn't been used in over 25 years. I used a
>> > variac to bring up the power slowly, because I was told that the
>> > capacitors needed to be reconditioned. Everything seemed to work fine
>> > and I was able to pull in some transmissions with a random wire
>> > antenna. I don't have a transmitter yet, so I am hoping to just use a
>> > longer random wire antenna, laid along the attic until I can get money
>> > together etc. My question is probably dumb, but I was wondering if
>> > there is an "optimal length" for a random wire antenna for hf?
>>
>> At one time, at least, the ARRL Handbook recommended something like 95
>> feet. Way too long is better than way too short. For instance, my 75
>> meter dipole receives OK on 20 meters. The 20 meter antenna is
>> useless on 75.
>
> It is always better to be to long than to short...

Yep. That's what _my_ spam claims, too. HI!HI!

1509. Re: Random wire Receiver antenna good enough?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-20 02:59:06 UTC
From: nm5k@wt.net
Message-ID: <1190257146.379681.236050@t8g2000prg.googlegroups.com>
Source record: 36284

On Sep 19, 11:12 am, "Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote:
> <jwbsoluti...@gmail.com> wrote in message

>
> At one time, at least, the ARRL Handbook recommended something like 95 feet.
> Way too long is better than way too short. For instance, my 75 meter dipole
> receives OK on 20 meters. The 20 meter antenna is useless on 75.
>
> Tam/WB2TT

Thats mainly due to the way it's fed though.
As far as receiving, the short wire is plenty long enough,
just needs a better match.
If you feed a random wire straight to the center pin of most
radios, it will work pretty well. Even a short one.
Course, I probably would prefer a longer wire vs a short
one if I had my choice, but it's not really critical for a
good radio.
This is kind of similar to taking a 80 meter dipole
and shorting together the coax at the radio end,
and feeding as a vertical for 160m. The receiver will
be fairly quiet in the normal 80m config, but will jump to
life once you change the feed system around.
As far as the original poster, I would use whatever
fits. Not critical at all if you are truly feeding it
like a random wire.
Also, if you just stick the end of the wire in the center
pin of the radio, you shouldn't need any kind of
tuner in most all cases, if the radio is decent.
MK

1510. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-20 03:28:57 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fcspds$bh5$1@news.albasani.net>
Source record: 36285

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/09-19-2007/0004666248&EDATE=

JS

1511. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-20 05:49:26 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <HRnIi.37146$L_7.33202@newsfe16.phx>
Source record: 36286

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:GOWdnSikLtZOc23bnZ2dnUVZ8smgnZ2d@pipex.net...
> > In the US, copper water pipe comes in three grades, K, L and M, in
> > increasing order of quality/cost. We also have "DWV" copper pipe for
drains
> > and vents (non-pressure applications, I guess). Same over there?
> ================
> Question : Would any of the above grades of copper pipe affect the RF
> radiation characteristics of the antenna ?
>

I don't think so -- just the cost. Aluminum, which is less conductive than
any common copper alloy, makes fine antennas.

By the way, please refer to the copper pipe section at
http://www.homedepot.com/webapp/wcs/stores/servlet/ContentView?pn=Pipes&lang
Id=-1&storeId=10051&catalogId=10053 (I think I had the price/quality
expressed backwards in my original post.)

"Sal"

1512. Re: Hustler G7-144 vs G6-144 vs dipole radiation pattern

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-20 12:40:10 UTC
From: I@dont.know
Message-ID: <46f269b2.6358578@news2.mot.com>
Source record: 36311

On Tue, 18 Sep 2007 19:02:11 -0700, dplatt@radagast.org (Dave Platt)
wrote:

>In article <pan.2007.09.19.00.14.25@ME.networksplus.net>,
>Nate Bargmann <n0nb.DO.NOT.SPAM@ME.networksplus.net> wrote:
>
>>Thanks Dave.
>>
>>That was an excellent post. It's interesting that I've read testimonials
>>on eHam and other web pages that claim 15 to 20 years of service with the
>>G7-144 with no complaints. Then there are some that have had some issues.
>
>The luck of the draw, I suppose?
>
>>The G6-144 is a bit more attractive to me right now due to the lower
>>price and being about 2/3 of the length of the G7. Interestingly, the G6
>>literature (available at http://www.dxengineering.com) says, "FCC
>>accepted for Repeater application at 6db gain based on EIA Standard
>>RS-239: gain compared to 1/2 wave dipole." I've never heard of antennas
>>being "FCC accepted for Repeater application" before.
>
>I imagine that there may be some such regulations for some of the
>commercial or public-safety bands? Minimum or maximum gains allowed,
>or cleanliness-of-pattern perhaps?
>

There are none I know of. However, commercial systems are licensed by
ERP, so I would suspect that the antenna gain figures must be accurate
in order to get the ERP calculations correct.

Regards,

Bruce

1513. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-20 20:33:30 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <46F2D91A.4000305@bellsouff.net>
Source record: 36287

Dave Platt wrote:
> In article <8eidnc1W7L3D0WzbRVnyjwA@pipex.net>,
> Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:
>
>> My question is directed to the different grades K,L and M ,whether any
>> particular grade would give better RF radiation performance .
>> It could be that the grade with the highest copper content gives the
>> best performance ,although I doubt that it will be measurable.
>
> My recollection is that the basic difference between the various
> grades is the thickness of the copper walls. The thicker-walled pipe
> is what's preferred for outdoor/buried use and/or higher pressures
> (e.g. use on the supply side of a house's water-pressure regulator).
>
> RF current flows only through the skin of a conductor... it doesn't
> penetrate very far into the body. One web calculator I found says
> that the skin depth of a 144 MHz signal in copper is around 200
> micro-inches, or 1/5000 of an inch. If the tubing wall is
> much thicker than this, the additional thickness will have no
> significant benefit in reducing resistive losses.
>
> Since even the thinnest-walled (Schedule M) copper pipe has a wall
> thickness which is about a hundred times more than the skin depth,
> there's no electrical benefit to using thicker-walled tubing (Schedule
> K or L).
>
> Unless there's some mechanical reason to want to use the heavier-
> schedule tubing, I'd just stick with Schedule M - it's lighter, less
> expensive, and should be plenty stiff and strong for most
> applications.
>

Go the cheapest way, as recommended above. You can't tell the difference
between the various grades without laboratory grade measuring equipment.
Surely no one receiving your signal could ever tell the difference.

Ed, NM2K

1514. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-20 20:38:40 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <46F2DA50.5030205@bellsouff.net>
Source record: 36288

John Smith wrote:
> John Smith I wrote:
>> http://www.itbusinessedge.com/blogs/cip/?p=170
>>
>> Regards,
>> JS
>
> http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/09-19-2007/0004666248&EDATE=
>
>
> JS

Why is anyone worrying about the BPL thing? It is pointless to worry about things that you cannot change, even when detrimental to you. Worry is non productive.

There is simply no way in hell that the needs of .5 million folks will supersede the needs of 300 million folks. Sorry, but it just isn't going to happen.

Instead of fretting and whining, why not try to come up with work arounds?

For instance, digital phone is probably much more able to handle the BPL noise than analog phone. Get busy! <G>

Ed, NM2K

1515. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-20 21:12:28 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <HNSdnYxiLK1JfG_bnZ2dnUVZ8saonZ2d@pipex.net>
Source record: 36289

> There is simply no way in hell that the needs of .5 million folks will
> supersede the needs of 300 million folks. Sorry, but it just isn't going
> to happen.
>
> Instead of fretting and whining, why not try to come up with work arounds?
>
> For instance, digital phone is probably much more able to handle the BPL
> noise than analog phone. Get busy! <G>
==========
Ed , The subject is BPL and its interference to Amateur Radio signal
reception.
You probably already have changed to a digital phone to mitigate
interference from your own (amateur radio)transmissions.

Frank GM0CSZ / KN6WH in northern Scotland where (like elsewhere
in the UK) BPL or PLT is not on because of demonstrated interference to
the radio spectrum. Moreover it is commercially not viable because up to
98% of households can get broadband via the telephone line.

Frank GM0CSZ / KN6WH

1516. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-20 22:37:16 UTC
From: dplatt@radagast.org
Message-ID: <s99bs4-qua.ln1@radagast.org>
Source record: 36290

In article <HNSdnYxiLK1JfG_bnZ2dnUVZ8saonZ2d@pipex.net>,
Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

> > There is simply no way in hell that the needs of .5 million folks will
>> supersede the needs of 300 million folks. Sorry, but it just isn't going
>> to happen.
>>
>> Instead of fretting and whining, why not try to come up with work arounds?

>Ed , The subject is BPL and its interference to Amateur Radio signal
>reception.
>You probably already have changed to a digital phone to mitigate
>interference from your own (amateur radio)transmissions.
>
>
>Frank GM0CSZ / KN6WH in northern Scotland where (like elsewhere
>in the UK) BPL or PLT is not on because of demonstrated interference to
>the radio spectrum. Moreover it is commercially not viable because up to
>98% of households can get broadband via the telephone line.

And I think the latter is an important issue.

Ed, I feel that it's an error to frame the BPL question as "the needs
of .5 million superced[ing] the needs of 300 million folks". That
would be a valid way to consider the issue *only* if it were, in fact,
valid that BPL was the only (or best) answer to "the needs of 300
million folks."

The analyses which have been published so far suggest quite strongly
that the matter is otherwise. Although some BPL proponents have been
claiming that BPL is the answer to the broadband connectivity needs
of under-served rural users (after all, almost everybody gets power
from the mains, right?), I have not seen *any* BPL proposal or
analysis which demonstrates that this is econonically possible. The
mains-BPL technologies which could provide meaningful amounts of
broadband bandwidth require a repeater/amplifier at frequent intervals
along the power lines and/or RF-bypass devices around pole
transformers. The capital costs of installing so many amplifiers /
repeaters appear to be prohibitive.

It appears that technologies such as WiMax will be able to provide
greater amounts of bandwidth, to a larger number of rural customers,
at substantially lower cost, and (by operating in licensed or ISM
spectrum) can do so without polluting the spectrum used by licensed
users of the HF bands.

In urban areas, cable-TV providers have the edge in providing
bandwidth to well-served areas thanks to their extensive installed
wiring plant. The telcos (with DSL) come in second, but DSL's
bandwidth is limited enough in a lot of areas that the telcos seem to
be struggling somewhat. BPL, with even lower bandwidth-per-customer,
looks even less economically viable in urban areas.

So, it's not an issue of "the needs of hams, vs. the needs of everyone
else." Rather, it's more an issue of "the needs of hams, and everyone
else with a stake in HF, vs. the desire of the power companies to make
a few fast bucks."

And, as the ARRL has pointed out, BPL doesn't *have* to create
interference on the ham bands. Motorola has proven otherwise. It
is possible to create a BPL-based hybrid system (fiber or
over-the-air microwave to the power pole, then a well-notched BPL down
the low-voltage lines to the house) without causing interference on
the ham bands.

The power companies *can* do it that way, if they wish to... and if
they can make an economic case that BPL is actually a financially
viable business. So far, nobody seems to have demonstrated that, and
the models seem to suggest otherwise.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1517. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-20 22:48:40 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fcutc8lkb1@news.jpl.nasa.gov>
Source record: 36291

Ed Cregger wrote:
> John Smith wrote:
>
>> John Smith I wrote:
>>
>>> http://www.itbusinessedge.com/blogs/cip/?p=170
>>>
>>> Regards,
>>> JS
>>
>>
>> http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/09-19-2007/0004666248&EDATE=
>>
>>
>> JS
>
>
>
> Why is anyone worrying about the BPL thing? It is pointless to worry
> about things that you cannot change, even when detrimental to you. Worry
> is non productive.
>
> There is simply no way in hell that the needs of .5 million folks will
> supersede the needs of 300 million folks. Sorry, but it just isn't going
> to happen.

Actually, preventing the "tyranny of the majority" is why a lot of laws (and for that matter consitutional provisions) exist. Otherwise you could, to take an extreme example, advocate the speedy euthanasia of all people over the age of 80 (or choose your preferred small minority), on the basis that their health care consumes resources that could better be devoted to improving the life of those that are younger.

1518. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-20 23:39:43 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fcv0buds1@news.albasani.net>
Source record: 36292

Dave Platt wrote:

> ...
> The power companies *can* do it that way, if they wish to... and if
> they can make an economic case that BPL is actually a financially
> viable business. So far, nobody seems to have demonstrated that, and
> the models seem to suggest otherwise.
>

You, obviously, have missed the whole point of just how IMPORTANT
various digital communications over power lines is/are.

1) The power companies can read your meter remotely.

2) You hook your stereo into the power line in one room, you hook up
amplified speakers, to the power line, in various rooms about the home.

3) Your TV tuner exists in one room and monitors in various rooms about
the home control/grab the signal off the power line.

4) Your baby monitor ...

5) Your home security system ...

6) Your home intercom ...

7) Your phone ...

8) Your amateur rig resides in one room ...

9) Various other devices, existing now and coming into existence in the
future ... and, the capability of ALL these devices to interact with one
another provides for the imagination.

10) The complete list boggles the mind.

And, the internet was not even mentioned.

Regards,
JS

1519. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-20 23:47:41 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fcv0qsds2@news.albasani.net>
Source record: 36293

Jim Lux wrote:

> ...
> Actually, preventing the "tyranny of the majority" is why a lot of laws
> (and for that matter consitutional provisions) exist. Otherwise you
> could, to take an extreme example, advocate the speedy euthanasia of all
> people over the age of 80 (or choose your preferred small minority), on
> the basis that their health care consumes resources that could better be
> devoted to improving the life of those that are younger.

If that argument had any true merit ...

There are more horse owners in the USA than amateurs, the "tyranny of
the majority" should be limited and those owners allowed freeway access
with their horses (which, predate the automobile!); absurd I tell you;
the reason is blatantly obvious without explanation!

Regards,
JS

1520. Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 00:38:25 UTC
From: Dave <db5151@hotmail.com>
Message-ID: <13f64koci9o8197@corp.supernews.com>
Source record: 36294

Anyone have any idea as to the probable performance characteristics of two whip 40" whip antennas mounted approx. six inches apart, and used for receiving shortwave, primarily between 6 MHz and 12 MHz? Would they be more receptive to a signal approaching f/b, as opposed to s/s? Just wondering... Hoping someone can offer some advice as to whether they would be in any way directional.

Thanks for any replies,

Dave

1521. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 01:17:16 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <vYEli.5118$Sd4.1705@nlpi061.nbdc.sbc.com>
Source record: 36295

John Smith wrote:
> If that argument had any true merit ...

Isn't amateur radio one of the inalienable rights?
--
73, Cecil http://www.w5dxp.com

1522. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 01:20:22 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <p%EIi.5119$Sd4.2559@nlpi061.nbdc.sbc.com>
Source record: 36296

Dave wrote:
> Anyone have any idea as to the probable performance characteristics of two
> whip 40" whip antennas mounted approx. six inches apart, and used for
> receiving shortwave, primarily between 6 MHz and 12 MHz? Would they be more
> receptive to a signal approaching f/b, as opposed to s/s? Just wondering...
> Hoping someone can offer some advice as to whether they would be in any way
> directional.

They would be directional at the frequency where
6 inches is 1/8 wavelength. :-)
--
73, Cecil http://www.w5dxp.com

1523. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 02:22:52 UTC
From: Dave <db5151@hotmail.com>
Message-ID: <13f6aoknl4dis7a@corp.supernews.com>
Source record: 36297

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:p%EIi.5119$Sd4.2559@nlpi061.nbdc.sbc.com...
> Dave wrote:
>> Anyone have any idea as to the probable performance characteristics of
>> two whip 40" whip antennas mounted approx. six inches apart, and used for
>> receiving shortwave, primarily between 6 MHz and 12 MHz? Would they be
>> more receptive to a signal approaching f/b, as opposed to s/s? Just
>> wondering... Hoping someone can offer some advice as to whether they
>> would be in any way directional.
>
> They would be directional at the frequency where
> 6 inches is 1/8 wavelength. :-)
> --
> 73, Cecil http://www.w5dxp.com

Hey Cecil, thanks for the reply.

Hmm. So, correct me if I'm wrong, but from what you're saying they would actually have some directional characteristics at approx. 2.5 MHz. What if I angled them apart at, say, 45 degrees? That would, I think, put the tops about 57 inches apart, and the two whips at right angles to each other. Any ideas what that would do? Or, if I flattened them out in opposite directions? I need an ARRL Antenna Handbook, only I wouldn't know what to look up...

Do appreciate your reply. Gives me something to think about...

Dave

1524. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 03:47:05 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns99B1D374379B1doldridgsprintca@64.59.135.159>
Source record: 36298

"Dave" <db5151@hotmail.com> wrote in
news:13f64koci9o8197@corp.supernews.com:

> Anyone have any idea as to the probable performance characteristics of
> two whip 40" whip antennas mounted approx. six inches apart, and used
> for receiving shortwave, primarily between 6 MHz and 12 MHz? Would
> they be more receptive to a signal approaching f/b, as opposed to s/s?
> Just wondering... Hoping someone can offer some advice as to whether
> they would be in any way directional.

If they are simply in parallel, they would not have much directivity. But
if one were to be phase-inverted with respect the other, there would be a
strong null along the bisector of the line joining them.

The gain at 9mhz is on the order of -30dbi, though so you will need a good
receiver or even a preamp.

--
Dave Oldridge+
ICQ 1800667

1525. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 04:39:40 UTC
From: Dave <db5151@hotmail.com>
Message-ID: <13f6ip4pk89bpcf@corp.supernews.com>
Source record: 36299

"Dave Oldridge" <doldridg@leavethisoutshaw.ca> wrote in message
news:Xns99B1D374379B1doldridgsprintca@64.59.135.159...
> "Dave" <db5151@hotmail.com> wrote in
> news:13f64koci9o8197@corp.supernews.com:
>
>> Anyone have any idea as to the probable performance characteristics of
>> two whip 40" whip antennas mounted approx. six inches apart, and used
>> for receiving shortwave, primarily between 6 MHz and 12 MHz? Would
>> they be more receptive to a signal approaching f/b, as opposed to s/s?
>> Just wondering... Hoping someone can offer some advice as to whether
>> they would be in any way directional.
>
> If they are simply in parallel, they would not have much directivity. But
> if one were to be phase-inverted with respect the other, there would be a
> strong null along the bisector of the line joining them.
>
> The gain at 9mhz is on the order of -30dbi, though so you will need a good
> receiver or even a preamp.
>
>
> --
> Dave Oldridge+
> ICQ 1800667

Aha! A strong (or deep) null! That's actually what I'm looking for. So, what would I look up to start learning how to set one up as phase-inverted? I have a copy of Joe Carr's Antenna Handbook (think that's the title), would it have anything on such a setup, do you think? What would I look for in the ARRL Antenna Handbook? Does this type of setup have a name to search on?

And yes, compared to my 110' longwire, the signal is miniscule. But I'm working on that.

Thank you so much, Dave, for this input. Now I have some idea as to what I am looking for, (I *think*).

Much appreciated.

Dave Beane

1526. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 05:39:10 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13f6m8aa143a5c2@corp.supernews.com>
Source record: 36300

Trying to phase two antennas that close together at that frequency range will be an educational experience at best, but more likely just an exercise in frustration unless you have much more patience than average. Such an array will be hyper-sensitive to everything. You might be able to fleetingly see a null after a lot of tweaking, but I seriously doubt you'll even get that. A tiny change in frequency, wiggling of the whips, or even movement in the vicinity of the whips will have a profound effect on any null you might see.

If a null from a small antenna is what you want, you'd have much better luck with a carefully constructed and balanced ("shielded") loop.

Roy Lewallen, W7EL

1527. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 06:08:34 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <GdJIi.118474$dI1.26821@newsfe08.phx>
Source record: 36301

"Ed Cregger" <ecregger@bellsouff.net> wrote in message
news:46F2DA50.5030205@bellsouff.net...

> There is simply no way in hell that the needs of .5 million folks will
> supersede the needs of 300 million folks. Sorry, but it just isn't going
> to happen.

< snip >

> Ed, NM2K

If that were true, we'd be in big trouble -- but it isn't.

Most of the several million (far fewer than 300 million) who might
potentially use BPL don't know what it is, don't know to ask for it and
might not even take it if it were offered. We 0.5 million are organized and
we know exactly what we (don't) want. An organized campaign usually beats a
muddled mob.

As long as we maintain a coherent strategy of opposition, we have the effect
of many times our number.

73,
"Sal"
KD6VKW

1528. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 06:29:01 UTC
From: gsm@mendelson.com
Message-ID: <slrnff6p1d.dr0.gsm@cable.mendelson.com>
Source record: 36302

Sal M. Onella wrote:
> As long as we maintain a coherent strategy of opposition, we have the effect
> of many times our number.

Do you use Google?

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

1529. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 06:36:17 UTC
From: Dave <db5151@hotmail.com>
Message-ID: <13f6pjqgnk900a2@corp.supernews.com>
Source record: 36303

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:13f6m8aa143a5c2@corp.supernews.com...
> Trying to phase two antennas that close together at that frequency range
> will be an educational experience at best, but more likely just an
> exercise in frustration unless you have much more patience than average.
> Such an array will be hyper-sensitive to everything. You might be able to
> fleetingly see a null after a lot of tweaking, but I seriously doubt
> you'll even get that. A tiny change in frequency, wiggling of the whips,
> or even movement in the vicinity of the whips will have a profound effect
> on any null you might see.
>
> If a null from a small antenna is what you want, you'd have much better
> luck with a carefully constructed and balanced ("shielded") loop.
>
> Roy Lewallen, W7EL

Found my copy of Joe Carr's Practical Antenna Handbook, and re-read the section on phasing verticle antennas. I believe you. Back to square one, which was the thought that a loop was probably my best bet (I had come to that conclusion a while back, but forgot why.)

Did try a shielded loop once upon a time, but didn't feel it gave me anything to look forward to. Guess I'll dig it out and try it again. Will try shielding it with copper "tape" and see what that buys me. I did try a piece of coax wound in a triple-turn loop to give me 2.5 or 3 uH with which to tune, with the shield cut away to expose the center conductor for a couple inches, but didn't feel this offered anything either. Not sure what I'll do. Poke around and try different things until I find something that works better than the rest. Any ideas? I'm all ears. I tried the whips because I had them on hand, and they were easy to install. Seems I read somewhere that contrary to conventional wisdom, the shield on a shielded loop doesn't actually shield at all, but becomes the antenna element. Anyone know anything about that line of thought? I obviously know nothing, and am trying to learn. Just don't know where to focus my energies.

Thanks,

Dave

1530. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 06:46:03 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <46F368AB.4060601@bellsouff.net>
Source record: 36304

Dave Platt wrote:
> In article <HNSdnYxiLK1JfG_bnZ2dnUVZ8saonZ2d@pipex.net>,
> Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:
>
>> > There is simply no way in hell that the needs of .5 million folks will
>>> supersede the needs of 300 million folks. Sorry, but it just isn't going
>>> to happen.
>>>
>>> Instead of fretting and whining, why not try to come up with work arounds?
>
>> Ed , The subject is BPL and its interference to Amateur Radio signal
>> reception.
>> You probably already have changed to a digital phone to mitigate
>> interference from your own (amateur radio)transmissions.
>>
>>
>> Frank GM0CSZ / KN6WH in northern Scotland where (like elsewhere
>> in the UK) BPL or PLT is not on because of demonstrated interference to
>> the radio spectrum. Moreover it is commercially not viable because up to
>> 98% of households can get broadband via the telephone line.
>
> And I think the latter is an important issue.
>
> Ed, I feel that it's an error to frame the BPL question as "the needs
> of .5 million superced[ing] the needs of 300 million folks". That
> would be a valid way to consider the issue *only* if it were, in fact,
> valid that BPL was the only (or best) answer to "the needs of 300
> million folks."
>
> The analyses which have been published so far suggest quite strongly
> that the matter is otherwise. Although some BPL proponents have been
> claiming that BPL is the answer to the broadband connectivity needs
> of under-served rural users (after all, almost everybody gets power
> from the mains, right?), I have not seen *any* BPL proposal or
> analysis which demonstrates that this is econonically possible. The
> mains-BPL technologies which could provide meaningful amounts of
> broadband bandwidth require a repeater/amplifier at frequent intervals
> along the power lines and/or RF-bypass devices around pole
> transformers. The capital costs of installing so many amplifiers /
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> It appears that technologies such as WiMax will be able to provide
> greater amounts of bandwidth, to a larger number of rural customers,
> at substantially lower cost, and (by operating in licensed or ISM

> spectrum) can do so without polluting the spectrum used by licensed
> users of the HF bands.
>
> In urban areas, cable-TV providers have the edge in providing
> bandwidth to well-served areas thanks to their extensive installed
> wiring plant. The telcos (with DSL) come in second, but DSL's
> bandwidth is limited enough in a lot of areas that the telcos seem to
> be struggling somewhat. BPL, with even lower bandwidth-per-customer,
> looks even less economically viable in urban areas.
>
> So, it's not an issue of "the needs of hams, vs. the needs of everyone
> else." Rather, it's more an issue of "the needs of hams, and everyone
> else with a stake in HF, vs. the desire of the power companies to make
> a few fast bucks."
>
> And, as the ARRL has pointed out, BPL doesn't *have* to create
> interference on the ham bands. Motorola has proven otherwise. It
> *is* possible to create a BPL-based hybrid system (fiber or
> over-the-air microwave to the power pole, then a well-notched BPL down
> the low-voltage lines to the house) without causing interference on
> the ham bands.
>
> The power companies *can* do it that way, if they wish to... and if
> they can make an economic case that BPL is actually a financially
> viable business. So far, nobody seems to have demonstrated that, and
> the models seem to suggest otherwise.
>

Very interesting, Dave. You have cheered me up - believe it or not.

Ed, NM2K

1531. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 06:50:43 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <46F369C3.1040502@bellsouff.net>
Source record: 36305

Jim Lux wrote:
> Ed Cregger wrote:
>> John Smith wrote:
>>
>>> John Smith I wrote:
>>>
>>>> http://www.itbusinessedge.com/blogs/cip/?p=170
>>>>
>>>> Regards,
>>>> JS
>>>
>>>
>>> http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/09-19-2007/0004
666248&EDATE=
>>>
>>>
>>> JS
>>
>>
>>
>> Why is anyone worrying about the BPL thing? It is pointless to worry
>> about things that you cannot change, even when detrimental to you.
>> Worry is non productive.
>>
>> There is simply no way in hell that the needs of .5 million folks will
>> supersede the needs of 300 million folks. Sorry, but it just isn't
>> going to happen.
>
> Actually, preventing the "tyranny of the majority" is why a lot of laws
> (and for that matter consitutional provisions) exist. Otherwise you
> could, to take an extreme example, advocate the speedy euthanasia of all
> people over the age of 80 (or choose your preferred small minority), on
> the basis that their health care consumes resources that could better be
> devoted to improving the life of those that are younger.

I'm a pessimist, as you have probably concluded.

Democracy (yeah, I know, a democratic republic) exists only in fairy
tales. When it comes to money, this country's government runs roughshod
over the American people's needs every time. NAFTA, GATT and a few other
treaties prove this premise to be true. My point is hinged upon the
supposition that if there is money to be made in BPL, it will be
implemented whether it is good for us or not. Worrying about things that
we cannot change is pointless. This comes from a habitual worrier that
is trying to get a grip on it. <G>

Ed, NM2K

1532. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 06:58:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fcvq2gsau1@news.albasani.net>
Source record: 36306

Cecil Moore wrote:
> John Smith wrote:
>> If that argument had any true merit ...
>
> Isn't amateur radio one of the inalienable rights?

Cecil:

You preach to the choir of "one who respects your logic"; Yes, I
believe so,; well spoken!

Regards,
JS

1533. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 07:02:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fcvq9vsau2@news.albasani.net>
Source record: 36307

Ed Cregger wrote:

> ...
> I'm a pessimist, as you have probably concluded.
>
> Democracy (yeah, I know, a democratic republic) exists only in fairy
> tales. When it comes to money, this country's government runs roughshod
> over the American people's needs every time. NAFTA, GATT and a few other
> treaties prove this premise to be true. My point is hinged upon the
> supposition that if there is money to be made in BPL, it will be
> implemented whether it is good for us or not. Worrying about things that
> we cannot change is pointless. This comes from a habitual worrier that
> is trying to get a grip on it. <G>
>
> Ed, NM2K

If, and only if, the .5 million amateurs (and who knows how many are
still active--if STILL alive!) control the 350+ million Americans can
justice, fairness and democracy NOT be had! Get real ...

Regards,
JS

1534. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 07:05:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fcvqgfsau3@news.albasani.net>
Source record: 36308

Sal M. Onella wrote:

> ...
> As long as we maintain a coherent strategy of opposition, we have the effect
> of many times our number.
>
> 73,
> "Sal"
> KD6VKW
>
>

Yes, it HAS worked before!

Now, many only wonder why it no longer works?

I ponder ALL this myself--as I have stated--and, on many occasions--I
only wonder why it ever worked???

Regards,
JS

1535. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 08:08:38 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13f6v0ic0p20re6@corp.supernews.com>
Source record: 36309

Dave wrote:
> . . .
>. . .Seems I read
> somewhere that contrary to conventional wisdom, the shield on a shielded
> loop doesn't actually shield at all, but becomes the antenna element.
> Anyone know anything about that line of thought? I obviously know nothing,
> and am trying to learn. Just don't know where to focus my energies.

That's been discussed on this newsgroup a number of times. You should be able to find the relevant threads via groups.google.com.

Yes, the "shield" doesn't shield the antenna -- in fact, the outside of the "shield" *is* the antenna. What it does is aid in balancing the antenna, reducing common mode pickup which can reduce the null depth. "Conventional wisdom" that holds otherwise isn't wisdom at all, but a lack of understanding of some basic electromagnetic principles.

There's undoubtedly a massive amount of information easily available on the web regarding building and using small loop antennas. All you have to do is ignore the ubiquitous "conventional wisdom" explanations of how a "shielded" loop operates.

Roy Lewallen, W7EL

1536. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 08:11:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13f6v6cctpanr36@corp.supernews.com>
Source record: 36310

Ed Cregger wrote:
>
> I'm a pessimist, as you have probably concluded.
>
> Democracy (yeah, I know, a democratic republic) exists only in fairy
> tales. When it comes to money, this country's government runs roughshod
> over the American people's needs every time. NAFTA, GATT and a few other
> treaties prove this premise to be true. My point is hinged upon the
> supposition that if there is money to be made in BPL, it will be
> implemented whether it is good for us or not. Worrying about things that
> we cannot change is pointless. This comes from a habitual worrier that
> is trying to get a grip on it. <G>
>
> Ed, NM2K

I tend to agree with Ed. But the bright side of the situation is that, conversely, if there *isn't* money to be made in BPL, it won't be implemented. And it looks like there's a decent chance that's the case.

Roy Lewallen, W7EL

1537. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 11:36:51 UTC
From: amdx <amdx@knology.net>
Message-ID: <2fbb$46f3acb0$18d6b40c$10545@KNOLOGY.NET>
Source record: 36312

"Dave" <db5151@hotmail.com> wrote in message
news:13f6aoknl4dis7a@corp.supernews.com...
>
> "Cecil Moore" <nospam@w5dxp.com> wrote in message
> news:p%EIi.5119$Sd4.2559@nlpi061.nbdc.sbc.com...
>> Dave wrote:
>>> Anyone have any idea as to the probable performance characteristics of
>>> two whip 40" whip antennas mounted approx. six inches apart, and used
>>> for receiving shortwave, primarily between 6 MHz and 12 MHz? Would they
>>> be more receptive to a signal approaching f/b, as opposed to s/s? Just
>>> wondering... Hoping someone can offer some advice as to whether they
>>> would be in any way directional.
>>
>> They would be directional at the frequency where
>> 6 inches is 1/8 wavelength. :-)
>> --
>> 73, Cecil http://www.w5dxp.com
>
> Hey Cecil, thanks for the reply.
>
> Hmm. So, correct me if I'm wrong, but from what you're saying they would
> actually have some directional characteristics at approx. 2.5 MHz.

I don't get that number at all. Splitting the difference between 6 and 12
Mhz, say
9 Mhz, an 1/8th wavelength distance would be about 4 meters.
Anybody have a url of a page that shows receive pattern of two antennas at
different
spacings, 1/8, 1/4, 3/8, 1/2 wavelengths?
Dave, I recommend you download the demo version of EZNEC, it won't take
to long to model a couple of verticals at different spacing.
Mike

1538. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 16:30:44 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fd0rji$5cd$1@news.albasani.net>
Source record: 36313

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

Yes, it is on the way!

http://www.technologynewsdaily.com/node/8051

Regards,
JS

1539. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 17:21:11 UTC
From: amdx <amdx@knology.net>
Message-ID: <f8c8$46f3fd5f$18d6b40c$6288@KNOLOGY.NET>
Source record: 36314

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:uhPIi.51194$Um6.41115@newssvr12.news.prodigy.net...
> amdx wrote:
>> I don't get that number at all.
>
> Yep, Dave was off by a couple of magnitudes.
> 6 inches is 1/8WL at 246 MHz.
>
>> Anybody have a url of a page that shows receive pattern of two antennas
>> at different spacings, 1/8, 1/4, 3/8, 1/2 wavelengths?
>
> My 1980's ARRL Antenna Book has those patterns
> using different phasings and different spacings.
> --
> 73, Cecil http://www.w5dxp.com

Dave doesn't have the book, still looking for a url.
Mike

1540. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 17:21:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jsu7f3durgditj63q3bbq10oomm0idgskv@4ax.com>
Source record: 36315

On Fri, 21 Sep 2007 14:28:47 GMT, Navtex-Fan <No@way.invalid> wrote:

>I'm a SWL and am specially interested in Navtex DX-reception.My problem
>is (was) the heavy QRM from about every TV-set, monitor, PC in the
>neighbourhood.
...
>In despair - and against all advise in antenna textbooks (ground
>loops!) - I decided to make an additional earth point at the balun.
...
>QRM totally gone!
>Can anyone explain this?

Hi Dirk,

The coax to your antenna was suffering common mode currents. These currents came from noise sources in your home (by coupling directly through conduction, or over-the-air). Those currents traveled towards the antenna along the outer surface of the coax's braided shield. When those currents got to the antenna feed point, they reversed direction and entered INTO the transmission line and went back to your receiver.

When you grounded the far end, those currents went to ground the easy way instead of through your receiver's front end.

A "magnetic" BalUn is not an effective choke. Chokes are used to decouple the transmission line from the feed point. The W2DU choke BalUn (1:1) would also reduce noise.

You were LUCKY with ground loops. When the weather changes, you may see your luck change.

73's
Richard Clark, KB7QHC

1541. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 18:31:53 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns99B27553FB387doldridgsprintca@64.59.135.159>
Source record: 36316

"Dave" <db5151@hotmail.com> wrote in
news:13f6pjqgnk900a2@corp.supernews.com:

>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:13f6m8aa143a5c2@corp.supernews.com...
>> Trying to phase two antennas that close together at that frequency
>> range will be an educational experience at best, but more likely just
>> an exercise in frustration unless you have much more patience than
>> average. Such an array will be hyper-sensitive to everything. You
>> might be able to fleetingly see a null after a lot of tweaking, but I
>> seriously doubt you'll even get that. A tiny change in frequency,
>> wiggling of the whips, or even movement in the vicinity of the whips
>> will have a profound effect on any null you might see.
>>
>> If a null from a small antenna is what you want, you'd have much
>> better luck with a carefully constructed and balanced ("shielded")
>> loop.
>>
>> Roy Lewallen, W7EL
>
> Found my copy of Joe Carr's Practical Antenna Handbook, and re-read
> the section on phasing verticle antennas. I believe you. Back to
> square one, which was the thought that a loop was probably my best bet
> (I had come to that conclusion a while back, but forgot why.)
>
> Did try a shielded loop once upon a time, but didn't feel it gave me
> anything to look forward to. Guess I'll dig it out and try it again.
> Will try shielding it with copper "tape" and see what that buys me. I
> did try a piece of coax wound in a triple-turn loop to give me 2.5 or
> 3 uH with which to tune, with the shield cut away to expose the center
> conductor for a couple inches, but didn't feel this offered anything
> either. Not sure what I'll do. Poke around and try different things
> until I find something that works better than the rest. Any ideas?
> I'm all ears. I tried the whips because I had them on hand, and they
> were easy to install. Seems I read somewhere that contrary to
> conventional wisdom, the shield on a shielded loop doesn't actually
> shield at all, but becomes the antenna element. Anyone know anything
> about that line of thought? I obviously know nothing, and am trying
> to learn. Just don't know where to focus my energies.

I made a perfecly workable little DF once on a ferrite rod, wound with a
few turns. Worked like gangbusters on the local 2 and 6mhz stuff that I
was trying to locate.

--
Dave Oldridge+
ICQ 1800667

1542. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 18:40:00 UTC
From: Navtex-Fan <No@way.invalid>
Message-ID: <mn.acd87d79c52a00b3.59994@way.invalid>
Source record: 36317

On 2007-09-21, Richard Clark (67.168.144.41) wrote in
message <jsu7f3durgditj63q3bbq10oomm0idgskv@4ax.com>

> On Fri, 21 Sep 2007 14:28:47 GMT, Navtex-Fan <No@way.invalid> wrote:
>
>> I'm a SWL and am specially interested in Navtex DX-reception.My problem
>> is (was) the heavy QRM from about every TV-set, monitor, PC in the
>> neighbourhood.
> ...
>> In despair - and against all advise in antenna textbooks (ground
>> loops!) - I decided to make an additional earth point at the balun. ...
>> QRM totally gone!
>> Can anyone explain this?
>
> Hi Dirk,
>
> The coax to your antenna was suffering common mode currents. These
> currents came from noise sources in your home (by coupling directly
> through conduction, or over-the-air). Those currents traveled towards
> the antenna along the outer surface of the coax's braided shield. When
> those currents got to the antenna feed point, they reversed direction
> and entered INTO the transmission line and went back to your receiver.
>

Thanks for the clarification Richard.
So in fact the coax shield was part of the antenna?

> When you grounded the far end, those currents went to ground the easy
> way instead of through your receiver's front end.
>
> A "magnetic" BalUn is not an effective choke. Chokes are used to
> decouple the transmission line from the feed point. The W2DU choke
> BalUn (1:1) would also reduce noise.

Google gives many hits on this, thanks for the tip.

>
> You were LUCKY with ground loops. When the weather changes, you may
> see your luck change.
>

I'll keep my fingers crossed... :-)
The soil here is partly clay/ partly sand. In winter it becomes quite
moist. Would that adversely affect the situation?

1543. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 19:14:19 UTC
From: "Helmut Wabnig"
Message-ID: <2858f3lg7l7g2ei805psgu6kjkv6ea3394@4ax.com>
Source record: 36318

On Fri, 21 Sep 2007 14:28:47 GMT, Navtex-Fan <No@way.invalid> wrote:

>Hi group,
>
>I'm a SWL and am specially interested in Navtex DX-reception.My problem
>is (was) the heavy QRM from about every TV-set, monitor, PC in the
>neighbourhood.
>
>I'm currently using a T-aerial: horizontal wire 20 meters long, ca. 10
>meter above ground, vertical part ca. 10 meter down from the middle, =>
>1:9 "magnetic" balun => 25 meter RG58 to receiver. Receiver is located
>on the first floor, and is grounded via a thick wire to the earth pin
>of the house. Typical reception sounds like this:
>
><http://users.pandora.be/dirk.claessens2/div/not_grounded.wav>
>
>...humming, hissing, hard to decode, nightmare.
>
>In despair - and against all advise in antenna textbooks (ground
>loops!) -

I have never seen "ground loops" mentioned in an antenna book.
Ground loops are a main problem in audio frequency equipment,
not in HF.

In high frequency equipment GROUND EVERY POINT YOU CAN
to create a quasi-reference potential area as large as possible.

The usual way to overcome stray noise from nearby sources
are:

1.) Electrostatic shielding of the antenna.
Use coax for the horizontal dipoles, and ground the coax shield
at the ends but do not create short circuited loops.
(do not confuse with "ground loops")
2. Use a noise eliminator which feeds a phase shifted signal
from a small local antenna into a combining network.
3. Improve grounding as you did.

To me it is not quite clear what happened in your case,
but antennas are and have always been much try-and-error.
w.

> I decided to make an additional earth point at the balun. I
>drove two 1 meter 1/2 inch copperpipes into the ground, and connected
>these to the shield of the RG58 at the balun. Grounding at the receiver

>was unchanged. The result was stunning:
>
><http://users.pandora.be/dirk.claessens2/div/grounded.wav>
>
>QRM totally gone!
>Can anyone explain this?
>
>Thanks for any insight - Dirk
>

1544. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 19:43:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <g278f3pn92m7ce95pae8q126mkjggcas32@4ax.com>
Source record: 36319

On Fri, 21 Sep 2007 18:40:00 GMT, Navtex-Fan <No@way.invalid> wrote:

>Thanks for the clarification Richard.
>So in fact the coax shield was part of the antenna?

Hi Dirk,

Yes. And that "part" of the antenna was inside your home.

Please keep in mind that the same coax shield can support TWO currents: one on the outside and one on the inside. Even though it is the same metallic conductor, the shape creates two circuits because RF currents on the outside cannot penetrate to the inside (that is how it shields). Instead, those currents on the outside travel to a common point such as the feed and gain entrance.

Also, the reverse is true as well (when we are thinking in terms of transmission).

Put a choke somewhere along that outside circuit, and you cut off that current. In your case, you grounded it at both ends.

>The soil here is partly clay/ partly sand. In winter it becomes quite
>moist. Would that adversely affect the situation?

It has happened to me (Seattle = Rain City). The "earth" connection you use at the AC plug is NOT a shield, instead it is a safety ground. It is in close proximity to a lot of noisy circuits. Another noise solution is to move your plug to a different room's socket (on a different circuit breaker). You don't have to move the radio to experiment with this, use an extension cord. Better yet, run off battery and unplug everything but the antenna.

Remember these last suggestions if the noise returns with rain (or after a rain).

73's
Richard Clark, KB7QHC

1545. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 23:13:09 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fd1j65$fh7$1@news.jpl.nasa.gov>
Source record: 36321

John Smith wrote:
> Jim Lux wrote:
>
> > ...
>
>> Actually, preventing the "tyranny of the majority" is why a lot of
>> laws (and for that matter consitutional provisions) exist. Otherwise
>> you could, to take an extreme example, advocate the speedy euthanasia
>> of all people over the age of 80 (or choose your preferred small
>> minority), on the basis that their health care consumes resources that
>> could better be devoted to improving the life of those that are younger.
>
>
> If that argument had any true merit ...
>
> There are more horse owners in the USA than amateurs, the "tyranny of
> the majority" should be limited and those owners allowed freeway access
> with their horses (which, predate the automobile!); absurd I tell you;
> the reason is blatantly obvious without explanation!

Didn't say that ALL tyranny of the majority is suppressed. And, a few years back, there was huge public outcry in Houston, TX, when a law was passed making riding a horse on the highway illegal.

"freeways" are a special case anyway.. they're a "limited access highway" (limited access means that even though your property abuts the highway, you do not have the right to put a driveway onto it)

>
> Regards,
> JS

1546. Re: Coaxial cable ExtraFlex 9096IIA ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-21 23:46:45 UTC
From: ddufault@sympatico.ca
Message-ID: <1190418405.209383.76050@d55g2000hsg.googlegroups.com>
Source record: 36320

On 14 sep, 22:10, "Ralph Mowery" <rmowery28...@earthlink.net> wrote:
> <ddufa...@sympatico.ca> wrote in message
>
> news:1189817258.789879.121950@o80g2000hse.googlegroups.com...
>
> > Hi,
> > I need a low-loss flexible coaxial cable. Radio Works
> > (www.radioworks.com) sells the following model, which seems to fit my
> > needs:
>
> > ExtraFlex 9096-IIA (a flexible version of LMR400)
>
> > Did anyone try this coaxial cable? Are the specs as good as announced
> > on their web site? What are your comments?
>
> This is similar to the Davis Bury Flex. I have not used the 9096 but have
> used the Bury Flex. Measured at 440 mhz it seems to meet the db loss
> specifications. Measured 4 pieces about 100 feet long and got the same
> results. Just under a 3 db loss including the connectors.
>
> http://www.davisrf.com/ham1/coax.htm#buryflex

Very interesting! Thank you.

1547. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 00:26:57 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190420817.098151.214620@r29g2000hsg.googlegroups.com>
Source record: 36322

On 21 Sep, 12:14, Helmut Wabnig <.... .-- .- -... -. .. --.
@ .- --- -. dot .- - > wrote:
> On Fri, 21 Sep 2007 14:28:47 GMT, Navtex-Fan <N...@way.invalid> wrote:
> >Hi group,
>
> >I'm a SWL and am specially interested in Navtex DX-reception.My problem
> >is (was) the heavy QRM from about every TV-set, monitor, PC in the
> >neighbourhood.
>
> >I'm currently using a T-aerial: horizontal wire 20 meters long, ca. 10
> >meter above ground, vertical part ca. 10 meter down from the middle, =>
> >1:9 "magnetic" balun => 25 meter RG58 to receiver. Receiver is located
> >on the first floor, and is grounded via a thick wire to the earth pin
> >of the house. Typical reception sounds like this:
>
> ><http://users.pandora.be/dirk.claessens2/div/not_grounded.wav>
>
> >...humming, hissing, hard to decode, nightmare.
>
> >In despair - and against all advise in antenna textbooks (ground
> >loops!) -
>
> I have never seen "ground loops" mentioned in an antenna book.
> Ground loops are a main problem in audio frequency equipment,
> not in HF.
>
> In high frequency equipment GROUND EVERY POINT YOU CAN
> to create a quasi-reference potential area as large as possible.
>
> The usual way to overcome stray noise from nearby sources
> are:
>
> 1.) Electrostatic shielding of the antenna.
> Use coax for the horizontal dipoles, and ground the coax shield
> at the ends but do not create short circuited loops.
> (do not confuse with "ground loops")
> 2. Use a noise eliminator which feeds a phase shifted signal
> from a small local antenna into a combining network.
> 3. Improve grounding as you did.
>
> To me it is not quite clear what happened in your case,
> but antennas are and have always been much try-and-error.
> w.
>

>
>
> > I decided to make an additional earth point at the balun. I
> >drove two 1 meter 1/2 inch copperpipes into the ground, and connected
> >these to the shield of the RG58 at the balun. Grounding at the receiver
> >was unchanged. The result was stunning:
>
> ><http://users.pandora.be/dirk.claessens2/div/grounded.wav>
>
> >QRM totally gone!
> >Can anyone explain this?
>
> >Thanks for any insight - Dirk- Hide quoted text -
>
> - Show quoted text -- Hide quoted text -
>
> - Show quoted text -

Hi, let me clarify your problem. The most efficient radiator is one
wave length long where it is considered to be in equilibrium with a
parallel electrical cuircuit
instead of the usual series circuit. For most efficient radiation both
the capacitance and the inductance
must act as a energy storage such that when the terminals are shorted
the energy is released in a burst such that radiation can begin,
the electrical circuit by the way is often called a TANK cuircuit. In
the case of a fractional wave length radiator the pendulum type
radiation is not available for radiation and thus it travels up the
outside of the coax where it can radiate or become part of the "real
resistance" of the radiator in a similar way a vertical 1/2 wave
antenna would do when half of the applied energy is absorbed by the
ground.
Per the replies you will see what these currents are named when one
has an antenna that wants to work as a full wave length long even tho
a 1/2 wave length of the radiator is missing for max efficiency.
Hope that helps
Regards
Art KB9MZ

1548. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 01:02:16 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190422936.821481.78750@57g2000hsv.googlegroups.com>
Source record: 36323

On 20 Sep, 22:39, Roy Lewallen <w...@eznec.com> wrote:
> Trying to phase two antennas that close together at that frequency range
> will be an educational experience at best, but more likely just an
> exercise in frustration unless you have much more patience than average.
> Such an array will be hyper-sensitive to everything. You might be able
> to fleetingly see a null after a lot of tweaking, but I seriously doubt
> you'll even get that. A tiny change in frequency, wiggling of the whips,
> or even movement in the vicinity of the whips will have a profound
> effect on any null you might see.
>
> If a null from a small antenna is what you want, you'd have much better
> luck with a carefully constructed and balanced ("shielded") loop.
>
> Roy Lewallen, W7EL

Let me clarify some of the remarks made. A efficient antenna is when
the wire is
one wave length long and fed at its extremities. This can be
circumvented on a loop
by winding the 1WL wire on a non conductive hoolah loop both in a
clock wise and counterclockwise
in a overlapping method (insulated magnet wire preffered)
such that the windings inductance balance to zero for a resistive
impedance
at the feed point The windings may have to be stretched some what to
balance outany stray capacitance added
or a broadcast type variable capacitor can be added if one is lazy.
The bandwidth is broad enough on most bands with a resistive impedance
of around 50 odd ohms.
If one deviates much from the desired frequencylength one will see a
resistive impedance
in the single digits so take care with the wave length measurements
This loop design based on Gaussian laws provides a broad bandwidth
with smaller physical size
compared to the standard magnetic loop design together with extra
gain. And yes one does not
need that expensive high voltage variable capacitor required for
movement around the band as required with presently known loop
designs.
By the way the element can be jumpered for use on other bands!
Have fun
Art KB9MZ
PS I have written a somewhat amaterish thesis on Gaussian antennas
for which I have applied for a patents, I am sure that a scan of past

posts on the subject will reveal the URL which I have not put in my
memory box.
Amateurs have not used this new design method as they are happy with
existing
arrays knowing that all is already known about antennas and all later
designs
must be fraudulent
Art KB9MZ....xg

1549. Tower Space Available

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 01:42:28 UTC
From: "Scott M. Quitadamo" <scott.quitadamo@gmail.com>
Message-ID: <1190425348.675754.32620@w3g2000hsg.googlegroups.com>
Source record: 36324

Vertical Real Estate

In 2003, Clear Channel created the Vertical Real Estate division and hired Scott Quitadamo to promote its tower portfolio.

Clear Channel owns and operates approximately 1,500 broadcast transmission towers across the US. many of which are available for co-location by third parties such as cellular and PCS companies, wireless internet, fixed wireless, and other broadcasters.

Contact
SCOTT M. QUITADAMO
DIRECTOR, VERTICAL REAL ESTATE
3405 PIEDMONT ROAD NE, SUITE 500
ATLANTA, GA 30305
PHONE: 888-551-SITE (7483)
EMAIL: TOWERS(at)CLEARCHANNELdot.COM

National site list available at towers.clearchannel.com.

Download a site lease application at http://towers.clearchannel.com/download.php

General

What does Clear Channel Vertical Real Estate do?

Clear Channel Vertical Real Estate drafts and routes Wireless Tenant lease and related documents (we are the landlord or lessor) related to the following activities:

1. Tower and Building Space Leasing to Wireless Tenants
2. Tenant Lease Amendments
3. AM & FM Diplex Agreements
4. SCA’s (English & Foreign Language)
5. Expired Lease Renewals (not term renewals)
6. Equipment Modifications and Additiona
7. Entity Name Changes
8. Unpaid Tenants
9. Shared Facilities/Infrastructure
10. Rooftop Leases
11. Other tenant leasing matters as needed.

What types of tenant leasing clients does Vertical Real Estate handle?

Anything wireless, including: Cellular, PCS, Broadcast TV & Radio, Wireless Internet, Government, Telemetry, 2-way, etc.

How do I contact Vertical Real Estate?

Clear Channel Vertical Real Estate
Attn: Scott M. Quitadamo
3405 Piedmont Rd., Suite 500
Atlanta, GA 30305
404-879-5670
towers(at)clearchannelDOTcom

Does Vertical Real Estate also handle leases where Clear Channel is a tenant on another company's tower?

No. Please contact the Clear Channel Corporate Real Estate in San Antonio.

Where can I find a Tower Site Lease application for a potential tenant?

www.towers.clearchannel.com Click the Site Application Link or contact Scott Quitadamo at 404-879-5670 (888-551-SITE toll free) for more site information.

What carriers do we have national Master Lease Agreements with?

- Verizon
- Nextel
- Sprint
- ClearWire
- Lojack

We also have commonly accepted lease template agreements with:
- MediaFLO
- Cingular
- T-Mobile
- Federal Express
- USA Mobility (fka Arch/Pagenet)
- NY State Police
- And many others

Leasing Process

What are the typical steps in the leasing process (see also Leasing Process Checklist)?

- Tenant Interest & Site Identification
- Lease Application
- Site Information (Due Diligence) & Feasibility
- Lease Drafting & Review
- Notice to Proceed & Construction

What information is required by Vertical Real Estate get the leasing process started?

- Site Identification (ASR/Coordinates/City State, Calls, etc.)
- Applicant Name, Prospect Name/Title, Contact Phone, Email, Service Type
- Application: Proposed equipment specs (lines/antennas/ground space/

power requirements).
• Timeline and Target Rent.
• Existing Lease Documents (if any)
• Purpose of lease (co-location, diplex, upgrade, renewal, etc.)

I am a prospective wireless tenant and want me to meet Clear Channel's local representative at the site, what do I do?

• Site Visits/Site Access – A site visit is strongly suggested and often requested for/by all wireless tenants to inspect the compound and discuss various engineering and construction issues related to: shelter capacity, rack space, utility services availability, backup power generation, current and proposed equipment locations, tower obstructions, and other issues.

Site access is restricted and governed by the Station Engineer or Real Estate Manager (CCO). We ask Applicants make arrangements for access at least 5 days in advance. Contact Clear Channel Vertical Real Estate for additional information at 888-551-SITE.

Do we always use the same lease template for all tenants?

• We have national Master Lease Agreements (MLAs) with several national companies. We also have commonly accepted lease template agreements with: MediaFLO Cingular T-Mobile Federal Express USA Mobility (fka Arch/Pagenet) NY State Police and many others.

• All other tenants use either the Standard Lease or a Standardized Lease Template.

• Clear Channel Outdoor Leases (Billboards) must use the Outdoor Lease Template. Existing MLA's and other lease forms are not used on Outdoor properties.

Who signs the leases and how are they distributed?

• We route all leasing documents through Atlanta and are executed by the EVP Distribution Development.

• We require 3 originals for Clear Channel plus # the tenant needs. Originals at Clear Channel are distributed to: Vertical Real Estate, Real Estate in San Antonio, the Station Business Manager, and one electronic copy of the lease is routed to the station engineer.

What is the Leasing Process Checklist?

• This is the checklist we follow for almost every lease we draft:

Leasing Checklist (Application through Lease Execution)
☐ Application Complete (all relevant info complete and correct)
Determine Lease Type:
☐ New Business *
☐ Upgrade Increase *
☐ Renewal (Expired Lease)

☐ Other
☐ Validate and Verify Site Identification: ASR and/or Coordinates and Address, City, State, and Clear Channel Station Call Letters (if any).
Pull or Create Property File Folder for the following and obtain all missing items (check shared drive and SA drive)
☐ LPD or Deed **
☐ Ground Lease (__requires LL consent?) **
☐ Structural (date_____ / Tenant_____)
☐ Tower Drawings (original construction) ***
☐ Current Tower Loading (attach Tower Equipment Detail sheet)
* Items required only if New Business or Upgrade Increase in Tower Load
**If this not available, contact station business manager and Jo Michele
*** If not available then obtain tower model number, manufacturer, and the date it was constructed from station engineer.
Send Preliminary Feasibility Checklist email, Tower Equipment Detail sheet, and copy of Application to Station Engineer with CC: to Market Manager and RVP Engineer.
(see Feasibility Checklist below)
☐ Enter Application into Payday Report
☐ Review Current Tenant Lease (if applicable) and note entity names, dates, and equipment details.
☐ Prepare chains-of-assignment if requested by Applicant.
☐ Review Ground Lease, note entity names, expiration date, and file in Property Folder.
☐ Prepare Landlord consents, if needed, and note on outside of Property File Folder if Landlord consent is required.
☐ Request chains-of-assignment if requested by Applicant.
☐ Draft (PRT) Lease and email to Scott
☐ Follow Up 5 Days after Preliminary Feasibility Checklist email to verify receipt of completed Preliminary Feasibility Checklist and Tower Equipment Detail Sheet (if not completed by day 7 request assistance via email from Station Market & Business Manager and RVPE)
Prior to Lease distribution, we must have the following in the Tenant/ Property File (as required).
☐ Structural Study or Analysis and Reinforcement Design showing the structure will carry the loads as described in the Lease Exhibit B. (if required) (attach copies)
☐ Construction Drawings or A&E Drawings or Sketch: one tower elevation and one property drawing showing the placement of the Lessee’s equipment on the site. (attach copies)
☐ Permits (Zoning, Construction, Electrical) and other governmental authorizations as required by Federal, State, County, or local codes. (attach copies)
☐ Contractor/Installer Approval by Clear Channel’s Station engineer (via email; include the name, address, phone email, and Tax ID (FEIN/ TIN) number for the company that will be performing the installation of Lessee’s equipment).

What information does Vertical Real Estate require from the station engineer? (Feasibility Checklist)
• An email is sent to the station engineer (et al) as follows;
Clear Channel has received an application (attached) from [CLIENT NAME] to lease space on the above referenced tower. Please provide, within 5 days, the following information (if checked) via email.
☐ Available Tower Space at the elevation(s) requested and if NOT, what is (are) available??
☐ Available Ground/Shelter/Building Space as requested and if NOT, what is available??
☐ Available Electric and TELCO as requested and if NOT, what is available???
☐ Ground Lease or Property Deed/Legal Property Description
☐ Name of last tenant to install equipment on the Tower
☐ Is a Structural Analysis of the Tower Required?
If a Structural Analysis of the tower is required, please EMAIL or FAX copies of the following (if checked)…
☐ Last Structural
☐ Current Tower Loading (see attached Tower Equipment Detail sheet) *
☐ Tower Construction and Load Design Drawing

I need an "Entry and Testing Agreement" to access your site, what's the process?

• Entry & Testing Agreement - Applicants requesting access to the property or the tower for any reason are required to sign an Entry and Testing Agreement. We must use the Clear Channel Vertical Real Estate form which provides customary insurance and indemnification provisions in addition to spelling out what actions Applicants can perform on the premises. You can request a copy by emailing us at towers@clearchannel.com.

Tenant Construction

Do we always require Applicants to conduct a Structural Analysis of the tower?

• Before a fully executed lease is distributed, we require all applicants to provide either a complete structural analysis by a CC approved PE, or a written waiver from the station engineer. The applicant contracts and pays for the structural.

• The station engineer is required to provide all available tower documentation. At a minimum, the station engineer must provide the tower's model and manufacturer and current loading. In addition, construction drawings, foundation design, prior structurals, etc, are immeasurably helpful.

• In the event we do not have the necessary details to have the tenant conduct a proper study, we will permit the Applicant to access and map the tower.

• All expenses related to the structural analysis are paid by the applicant.

How are proposed tenant equipment installation and construction details reviewed and approved?

• While not “required”, the Applicant is responsible for the design, production, and delivery of drawings (either professional A&E or a construction drawings sketch, at our option). Drawings must be approved by the station engineer or operations manager (CCO) prior to the distribution of a fully executed lease.

Do we allow tenants to make Permanent Improvements to the tower or the premises?

• If a tower requires substantial structural reinforcement or replacement, we may allow an Applicant to evaluate and submit a request to that effect.

• Upgrade or replacement costs and logistics are reviewed and approved by Station Management, the RVPE, and the station engineer, and if approved, are incorporated into the lease agreement.

What Steps must a prospective Tenant follow in order to be in compliance with the lease prior to commencement of construction?

I. General – Notice to Proceed (NTP Checklist)
Prior to commencement of construction, LESSEE is required to provide the following:
1. Schedule of Construction (start date and estimated completion date: specific dates).
2. Proof on Insurance as more particularly described in the Lease Section 10. (attach copy)
3. Structural Study or Analysis and Reinforcement Design showing the structure will carry the loads as described in the Lease Exhibit B. (if required) (attach copies)
4. Construction Drawings or A&E Drawings or Sketch showing at lease one tower elevation and one property drawing showing the placement of the Lessee’s equipment on the site. (attach copies)
5. Permits (Zoning, Construction, Electrical) and other governmental authorizations as required by Federal, State, County, or local codes. (attach copies)
6. Contractor/Installer Approval. The name, address, phone and Tax ID (FEIN/TIN) number for the company that will be performing the installation of Lessee’s equipment.
7. Lessee’s Construction Manager/Supervisor: name, phone and email address.
8. Lessee is required under this lease to wait for WRITTEN APPROVAL from Lessor’s engineer before commencing construction.
Commencement of construction prior to written approval or delivery of required may result is a lease default.

Scott M. Quitadamo
404-879-5670

1550. Re: Propagation for Dummies

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 02:19:49 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1190427589.899292.273370@r29g2000hsg.googlegroups.com>
Source record: 36325

On Sep 18, 5:51 am, Roy Lewallen <w...@eznec.com> wrote:
> A good, easy to use, easy to understand, and free propagation program is
> available fromhttp://www.qsl.net/w6elprop/. A google search on w6elprop
> produces links to a couple of tutorials on using it.
>
> Roy Lewallen, W7EL
> (not to be confused with Shel Shallon, W6EL who has generously made his
> W6ELProp program available at no cost)

I used to use "PROPHET" for weather fax and rtty. I think it was just
a look-up table.

1551. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 06:04:15 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <Ef2Ji.163109$zz2.35878@newsfe12.phx>
Source record: 36326

"Geoffrey S. Mendelson" <gsm@mendelson.com> wrote in message
news:slrnff6p1d.dr0.gsm@cable.mendelson.com...
> Sal M. Onella wrote:
> > As long as we maintain a coherent strategy of opposition, we have the
effect
> > of many times our number.
>
> Do you use Google?
>
> Geoff.

I do. It's my home page so I can access it with one click.

I imagine I should infer something from your question but, no, nothing. I
asked Google for "BPL" and scanned the results but still nothing came to
mind. What's up?

1552. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 08:04:35 UTC
From: Dave <db5151@hotmail.com>
Message-ID: <13f9j5ei4h6sf2c@corp.supernews.com>
Source record: 36327

```
"amdx" <amdx@knology.net> wrote in message
news:f8c8$46f3fd5f$18d6b40c$6288@KNOLOGY.NET...
>
> "Cecil Moore" <nospam@w5dxp.com> wrote in message
> news:uhPIi.51194$Um6.41115@newssvr12.news.prodigy.net...
>> amdx wrote:
>>> I don't get that number at all.
>>
>> Yep, Dave was off by a couple of magnitudes.
>> 6 inches is 1/8WL at 246 MHz.
>>
>>> Anybody have a url of a page that shows receive pattern of two antennas
>>> at different spacings, 1/8, 1/4, 3/8, 1/2 wavelengths?
>>
>> My 1980's ARRL Antenna Book has those patterns
>> using different phasings and different spacings.
>> --
>> 73, Cecil http://www.w5dxp.com
>
> Dave doesn't have the book, still looking for a url.
> Mike
>

I've got the book on order at the library. May not wait. Might just buy
it, to have it on hand and have the latest edition.

Dave
```

1553. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 08:09:38 UTC
From: Dave <db5151@hotmail.com>
Message-ID: <13f9jeufvt5klf8@corp.supernews.com>
Source record: 36328

"art" <aunwin@insightbb.com> wrote in message
news:1190422936.821481.78750@57g2000hsv.googlegroups.com...
> On 20 Sep, 22:39, Roy Lewallen <w...@eznec.com> wrote:
>> Trying to phase two antennas that close together at that frequency range
>> will be an educational experience at best, but more likely just an
>> exercise in frustration unless you have much more patience than average.
>> Such an array will be hyper-sensitive to everything. You might be able
>> to fleetingly see a null after a lot of tweaking, but I seriously doubt
>> you'll even get that. A tiny change in frequency, wiggling of the whips,
>> or even movement in the vicinity of the whips will have a profound
>> effect on any null you might see.
>>
>> If a null from a small antenna is what you want, you'd have much better
>> luck with a carefully constructed and balanced ("shielded") loop.
>>
>> Roy Lewallen, W7EL
>
> Let me clarify some of the remarks made. A efficient antenna is when
> the wire is
> one wave length long and fed at its extremities. This can be
> circumvented on a loop
> by winding the 1WL wire on a non conductive hoolah loop both in a
> clock wise and counterclockwise
> in a overlapping method (insulated magnet wire preffered)
> such that the windings inductance balance to zero for a resistive
> impedance
> at the feed point The windings may have to be stretched some what to
> balance outany stray capacitance added
> or a broadcast type variable capacitor can be added if one is lazy.
> The bandwidth is broad enough on most bands with a resistive impedance
> of around 50 odd ohms.
> If one deviates much from the desired frequencylength one will see a
> resistive impedance
> in the single digits so take care with the wave length measurements
> This loop design based on Gaussian laws provides a broad bandwidth
> with smaller physical size
> compared to the standard magnetic loop design together with extra
> gain. And yes one does not
> need that expensive high voltage variable capacitor required for
> movement around the band as required with presently known loop
> designs.
> By the way the element can be jumpered for use on other bands!
> Have fun
> Art KB9MZ

> PS I have written a somewhat amaterish thesis on Gaussian antennas
> for which I have applied for a patents, I am sure that a scan of past
> posts on the subject will reveal the URL which I have not put in my
> memory box.
> Amateurs have not used this new design method as they are happy with
> existing
> arrays knowing that all is already known about antennas and all later
> designs
> must be fraudulent
> Art KB9MZ....xg
>

Thanks, Art (and others). I'll do a few searches on Google, and see what I can come up with.

Much appreciated.

Dave

1554. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 08:56:54 UTC
From: Dirk Claessens <No@way.invalid>
Message-ID: <mn.b2907d79053fc76a.59994@way.invalid>
Source record: 36329

On 2007-09-21, Richard Clark (67.168.144.41) wrote in
message <g278f3pn92m7ce95pae8q126mkjggcas32@4ax.com>

> Please keep in mind that the same coax shield can support TWO
> currents: one on the outside and one on the inside. Even though it is
> the same metallic conductor, the shape creates two circuits because RF
> currents on the outside cannot penetrate to the inside (that is how it
> shields). Instead, those currents on the outside travel to a common
> point such as the feed and gain entrance.
>

This is complicated, but I now (begin to) understand the true source of
the problems I had in the past. I'm not going to post a list here of
antennas I've been experimenting with to get rid of the QRM...

[..]

>> The soil here is partly clay/ partly sand. In winter it becomes quite
>> moist. Would that adversely affect the situation?
>
> It has happened to me (Seattle = Rain City). The "earth" connection
> you use at the AC plug is NOT a shield, instead it is a safety ground.
> It is in close proximity to a lot of noisy circuits.
[..]

So the safety ground is a bad RF ground in most situations.

Thanks again for the clarification Richard!

--
Dirk.
No trees were killed in the creation of this message;
however, many electrons were terribly inconvenienced.
http://users.pandora.be/dirk.claessens2

1555. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 09:03:33 UTC
From: Dirk Claessens <No@way.invalid>
Message-ID: <mn.b2977d7958598187.59994@way.invalid>
Source record: 36330

On 2007-09-22, art (74.133.197.189) wrote in
message <1190420817.098151.214620@r29g2000hsg.googlegroups.com>

> In the case of a fractional wave length radiator the pendulum type
> radiation is not available for radiation and thus it travels up the
> outside of the coax where it can radiate or become part of the "real
> resistance" of the radiator in a similar way a vertical 1/2 wave
> antenna would do when half of the applied energy is absorbed by the
> ground.

Sure, Navtex is broadcasted on 518/490 KHz. Even a 1/4 wavelength
antenna is beyond my real estate capabilities. :-(

> Per the replies you will see what these currents are named when one
> has an antenna that wants to work as a full wave length long even tho
> a 1/2 wave length of the radiator is missing for max efficiency.
> Hope that helps
> Regards
> Art KB9MZ

Thanks for the info Art, it is appreciated.

73 - Dirk

--
Dirk.
No trees were killed in the creation of this message;
however, many electrons were terribly inconvenienced.
http://users.pandora.be/dirk.claessens2

1556. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 10:33:25 UTC
From: ml <m@di.net>
Message-ID: <m-C3205E.06332022092007@news.verizon.net>
Source record: 36331
Body handling: HTML body converted to readable text

In article ,
Dirk Claessens wrote:

> On 2007-09-21, Richard Clark (67.168.144.41) wrote in
> message
>
> > Please keep in mind that the same coax shield can support TWO
> > currents: one on the outside and one on the inside. Even though it is
> > the same metallic conductor, the shape creates two circuits because RF
> > currents on the outside cannot penetrate to the inside (that is how it
> > shields). Instead, those currents on the outside travel to a common
> > point such as the feed and gain entrance.
> >
>
> This is complicated, but I now (begin to) understand the true source of
> the problems I had in the past. I'm not going to post a list here of
> antennas I've been experimenting with to get rid of the QRM...
>
> [..]
>
> >> The soil here is partly clay/ partly sand. In winter it becomes quite
> >> moist. Would that adversely affect the situation?
> >
> > It has happened to me (Seattle = Rain City). The "earth" connection
> > you use at the AC plug is NOT a shield, instead it is a safety ground.
> > It is in close proximity to a lot of noisy circuits.
> [..]
>
> So the safety ground is a bad RF ground in most situations.
>
> Thanks again for the clarification Richard!

<

1557. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 13:26:47 UTC
From: Navtex-Fan <No@way.invalid>
Message-ID: <mn.b39e7d79cc0bb9d2.59994@way.invalid>
Source record: 36332
Body handling: HTML body converted to readable text

On 2007-09-22, ml (151.205.97.125) wrote in
message

> < but i say how come ? they say all points are to be tied together at
> enterance of house so what is the diff between any two proper grounds
> connect points then?

From a safety viewpoint all ground points are equal.
For _RF_ however, one ground point _may_ be better then another,
depending on how the wiring goes through the house, and where the
ground wire is picking up QRM, hence Richard's suggestion to feed the
receiver from a wall outlet in another room.

1558. Re: Hustler G7-144 vs G6-144 vs dipole radiation pattern

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 13:51:37 UTC
From: Nate Bargmann <n0nb.DO.NOT.SPAM@ME.networksplus.net>
Message-ID: <pan.2007.09.22.13.51.35@ME.networksplus.net>
Source record: 36333

On Thu, 20 Sep 2007 12:40:10 +0000, BB wrote:

> There are none I know of. However, commercial systems are licensed by
> ERP, so I would suspect that the antenna gain figures must be accurate
> in order to get the ERP calculations correct.

Perhaps that is what they really mean, that the gain is certified for ERP
calculations.

73, de Nate >>

--

"The optimist proclaims that we live in the best of all possible worlds,
the pessimist fears this is true."

1559. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 14:22:39 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fd38fkvgr1@aioe.org>
Source record: 36334

"art" <aunwin@insightbb.com> wrote
>The most efficient radiator is one wave length long where
>it is considered to be in equilibrium with a parallel electrical
>cuircuit.

>For most efficient radiation both the capacitance and the
>inductance must act as a energy storage such that when
>the terminals are shorted the energy is released in a burst
>such that radiation can begin. ... In the case of a fractional
>wave length radiator the pendulum type radiation is not
>available for radiation

Note (for one example of many) that in an antenna system consisting of a 1/2-wave, center-fed dipole driven by a matched, balanced transmission line, the dipole itself radiates virtually all of the r-f energy present at the antenna feedpoint.

The radiation efficiency of a system as in the above example, but using a full wave dipole is no better than the 1/2-wave version, other things equal. The full wave version just has a different radiation pattern.

RF

1560. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 15:05:39 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <2P-dncjK845Ls2jbnZ2dneKdnZydnZ2d@pipex.net>
Source record: 36190

> From a safety viewpoint all ground points are equal.
> For _RF_ however, one ground point _may_ be better then another,
> depending on how the wiring goes through the house, and where the ground
> wire is picking up QRM, hence Richard's suggestion to feed the receiver
> from a wall outlet in another room.
==========
Even better: If no AC is required but say 12 -14 V-DC , run the receiver
from a sealed lead-acid battery and only have a RF earth.

My complete station runs on 12V batteries (charged by 2 solar panels and
a wind gen) ,resulting in NO mains born interference .

If charging from mains ,one could switch-off charging while receiving
and only put charger on battery or batteries while transmitting.
however when the batteries are on the charger all the time the batteries
will probably 'absorb' any mains noise ; moreover the mains power supply
unit then does not need to supply peak current to the transmitter ,just
the average current which for a typical 100 W PEP transmitter (even with
compression) is not more than approx. 8 Amperes.
In such a situation the station will also always be available (for some
time) during a power outage ......emergency comms.

With batteries the supply voltage will on average be below 13.8 V ,hence
the transmitter output will be slightly lower resulting in a signal
which will be lower but never more than a small fraction of 1 S-point.

Note : When reducing power by a factor 2 the resulting signal will be
reduced by half 1 S-point.

Frank GM0CSZ / KN6WH

1561. Re: coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 15:14:58 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190474098.909665.129560@k79g2000hse.googlegroups.com>
Source record: 36191

On 15 Sep, 19:16, WillW...@gmail.com wrote:
> I have built several coaxial dipole antennas in the past with great
> success. What I like about this antenna is it is broadbanded. If you
> design it using the center of the band of your interest, for the most
> part you can cover the entire band without retuning. The problem I
> have always had with this is the antenna is somewhat fragile. I have
> used plexiglass squares to secure the center of the antenna and taped
> nylon fishing line to the legs for more strengh. Any one with more
> ideas? These are mostly useful in the HF range. You can find the info
> on designing these athttp://www.amateurradios.info and other places
> on the net.
>
> 73's
> Bill w5grx

BILL
The best way of using coax with antennas is by stripping the PVC and
soaking the braid
in polyurothane so the clock wise windings are insulated from the
counter wound windings
By shorting one end of the braiding you can feed the other end i.e.
the two different windings
2where the actual span is somewhat less than a 1/2 wave (calculate
the true wire length)
The same can be accomplished by using somewhat less than a full wave
length folded back on itself
and directly feed the ends. This arrangement takes the fragility away
from the span by not feeding at the center
as well as using the center wire of the coax for mechanical strength.
This method comes in quite usefull when the need is for a 160 meter
antenna where you can wind the coax cross wise fashion so the ends for
feeding finish together.
This comes out at around 60 turns on a 2 foot former. This method
gives more gain over 1/2 wave designs in a similar way that a quad or
loop of one wavelength exceeds others. You can also use a single wire
instead of coax for cheapness if you wish but ofcourse you like coax
but this way you can join scraps of coax and solder them together
without bothering with individual strands. This method by the way does
not require a ground plane so you may leave the barrel on the ground
or place it on top of the tower for rotation purposes. You can have a
lot of fun with this antenna if you can also rotate the axis of the
barrel by useing two rotators or a combination satelite version.
Note thatusing a full wave length antenna you achieve tha same
gains(~ 3db) that a quad obtains over the standard fractional WL

length radiator(~2db when using single wire). Feed impedance is around 50/60 ohms resistive and is quite broad banded. The above is based around Gausswian formulae that also conforms with Maxwellian laws so you can use suitable modeling programs such as AO to derive all specifications. The above is subject to possible U.S. patents acceptance at this time
Enjoy
Regards
Art
KB9MZ....XG

1562. Ringo ARX-2 vs ARX-2B - What's the deal?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 15:28:32 UTC
From: Kevin Hastings <myfamilydotcom@hotmail.com>
Message-ID: <46f534a8$0$4038$9a566e8b@news.aliant.net>
Source record: 36192

I bought one of these at a hamfest from a SK's estate and thought it was a ARX-2 and then noticed the 52" coax harness attached to it and realized that it was probably a ARX-2B which seems to be the same except for the 3 radials which I guess didn't get sent to the hamfest.

Reviews of these 2 antennas seem to almost use the 2 model numbers interchangeably so the question is... Is it worth making up a radial system and taking another 5 feet of mast to re-manufacture this thing into a ARX-2B?

What would be the advantage? Maybe somebody's used both.

Thanks,- I was sure somebody out there knew this

Kevin VE9-XYZ
myfamilydotcom@hotmail.com

1563. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 16:54:57 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190480097.734512.199890@k79g2000hse.googlegroups.com>
Source record: 36193

On 20 Sep, 22:39, Roy Lewallen <w...@eznec.com> wrote:
> Trying to phase two antennas that close together at that frequency range
> will be an educational experience at best, but more likely just an
> exercise in frustration unless you have much more patience than average.
> Such an array will be hyper-sensitive to everything. You might be able
> to fleetingly see a null after a lot of tweaking, but I seriously doubt
> you'll even get that. A tiny change in frequency, wiggling of the whips,
> or even movement in the vicinity of the whips will have a profound
> effect on any null you might see.
>
> If a null from a small antenna is what you want, you'd have much better
> luck with a carefully constructed and balanced ("shielded") loop.
>
> Roy Lewallen, W7EL

If it was just for receiving I would make two antennas in coil fashion
as shown every where
on the net, connect them together with a half wave length coax and try
stretch them apart as much as room suplies and then roll the excess
phasing coax up. The cb's have the super scanner antenna that partialy
follows this principle using 1 wave length antennas with the
connecting coax folded and pushed inside the connecting aluminum
channel. Using a rolled antenna tesla style with them being physically
close together would be an interesting experiment. Look up in the net
home made radios for the station tuning method and also you might want
to choose different methods to connect them starting with a wire
connecting the two wound antennas at the top and feeding th bottom!
(that method by the way requires the two antennas to be wound
inopposite directions) I imagine you could get a null just like
turning an inside tv antenna because these stations in this
frequencyare high power as can be seen when a rogue station opens up
ontop of the station that you are listenning to and want to null out
of the picture.
Have fun
Art KB9MZ

1564. Re: Ringo ARX-2 vs ARX-2B - What's the deal?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 17:01:18 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <gTbJi.118049$pu2.33324@bignews1.bellsouth.net>
Source record: 36194

"Kevin Hastings" <myfamilydotcom@hotmail.com> wrote in message
news:46f534a8$0$4038$9a566e8b@news.aliant.net...
>I bought one of these at a hamfest from a SK's estate and thought it was a
>ARX-2 and then noticed the 52" coax harness attached to it and realized
>that it was probably a ARX-2B which seems to be the same except for the 3
>radials which I guess didn't get sent to the hamfest.
>
> Reviews of these 2 antennas seem to almost use the 2 model numbers
> interchangeably so the question is... Is it worth making up a radial
> system and taking another 5 feet of mast to re-manufacture this thing into
> a ARX-2B?
>
> What would be the advantage? Maybe somebody's used both.
>
> Thanks,- I was sure somebody out there knew this
>
> Kevin VE9-XYZ
> myfamilydotcom@hotmail.com
>

I have used the ARX2B with and without the decoupling stubs and didn't
notice any real difference. Theoretically, the decoupling stubs flatten the
radiation doughnut which provides better signal toward the horizon. I guess
I didn't operate many stations that were out there far enough to notice any
improvement in range. How high the antenna is mounted also plays into the
range. Mounting it low would probably remove any advantage provided by the
coax and decoupling stubs.

Ed, NM2K

1565. Re: Ringo ARX-2 vs ARX-2B - What's the deal?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 17:21:11 UTC
From: dplatt@radagast.org
Message-ID: <7hvfs4-14l.ln1@radagast.org>
Source record: 36198

>I bought one of these at a hamfest from a SK's estate and thought it was a
>ARX-2 and then noticed the 52" coax harness attached to it and realized that
>it was probably a ARX-2B which seems to be the same except for the 3 radials
>which I guess didn't get sent to the hamfest.
>
>Reviews of these 2 antennas seem to almost use the 2 model numbers
>interchangeably so the question is... Is it worth making up a radial
>system and taking another 5 feet of mast to re-manufacture this thing into a
>ARX-2B?
>
>What would be the advantage? Maybe somebody's used both.

My understanding is that the original Ringo design doesn't do a good job of decoupling the feedline (and mast, if conductive) from the antenna. There can be a significant amount of RF current flow on the outside of the feedline, below the impedance-matching loop/ring. This radiates RF which combines with that of the radiating section, altering the antenna's pattern to some extent (I think I've heard people say that it can cause the antenna to "squint", with its main radiation lobe pointing above or below the horizon). Because feedline RF depends on the length of the feedline and its grounding configuration, feedline-RF issue makes the original Ringo somewhat sensitive to the specific conditions under which it's installed - works great for some people, poorly for others.

Ordinary copper-pipe J-poles can suffer from the same problem, but as they're a lower-gain antenna with an inherently-broader vertical pattern I suspect that the problem is less noticeable.

The coax harness and radials (which you can probably replace with quarter-wave sections of aluminum rod-stock, suitably threaded) act as a decoupling section, isolating the feedline from the antenna and making it less sensitive to the conditions of installation.

You might be able to achieve a similar effect by simply rolling up a couple of feed of the top of the feedline into a coil 4-5" in diameter, just below the feedpoint, and insulating the antenna from the mast itself.

--
Dave Platt <dplatt@radagast.org> AE6EO
Friends of Jade Warrior home page: http://www.radagast.org/jade-warrior
I do _not_ wish to receive unsolicited commercial email, and I will
boycott any company which has the gall to send me such ads!

1566. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 17:40:05 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <nvcaf31qo9flmkjs9csr0m8vern1ae75mj@4ax.com>
Source record: 36195

On Sat, 22 Sep 2007 16:05:39 +0100, Highland Ham
<abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

>Even better: If no AC is required but say 12 -14 V-DC , run the receiver
>from a sealed lead-acid battery and only have a RF earth.
>
>If charging from mains ,one could switch-off charging while receiving
>and only put charger on battery or batteries while transmitting.

Hi Frank,

You are a proponent of one of my suggestions; yes, battery operation
(as I have as well) solves many issues.

>My complete station runs on 12V batteries (charged by 2 solar panels and
>a wind gen) ,resulting in NO mains born interference .
>however when the batteries are on the charger all the time the batteries
>will probably 'absorb' any mains noise ;

This is true only if the interfering voltage appears across the
battery - a rare occurrence unless you are mobile and speaking of
generator/alternator whine.

If batteries are float charged, then there is a path from the radio,
through the batteries, to the charger, to the mains and common mode
follows that path. Similar common mode paths of (in)convenience take
time to discover - like an external DSP powered by a wall-wart.

73's
Richard Clark, KB7QHC

1567. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 17:50:49 UTC
From: gsm@mendelson.com
Message-ID: <slrnffal6b.9je.gsm@cable.mendelson.com>
Source record: 36196

Sal M. Onella wrote:
> I imagine I should infer something from your question but, no, nothing. I
> asked Google for "BPL" and scanned the results but still nothing came to
> mind. What's up?

Google invested $100,000,000 in Current Communications.

Some hams have been boycotting Google since then.

Geoff,

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

1568. Re: Ringo ARX-2 vs ARX-2B - What's the deal?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 18:04:39 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1190484279.068297.44010@57g2000hsv.googlegroups.com>
Source record: 36197

On Sep 22, 2:01 pm, "Ed Cregger" <ecreg...@bellsouff.net> wrote:
> "Kevin Hastings" <myfamilydot...@hotmail.com> wrote in message
>
> news:46f534a8$0$4038$9a566e8b@news.aliant.net...
>
>
>
>
>
> >I bought one of these at a hamfest from a SK's estate and thought it was a
> >ARX-2 and then noticed the 52" coax harness attached to it and realized
> >that it was probably a ARX-2B which seems to be the same except for the 3
> >radials which I guess didn't get sent to the hamfest.
>
> > Reviews of these 2 antennas seem to almost use the 2 model numbers
> > interchangeably so the question is... Is it worth making up a radial
> > system and taking another 5 feet of mast to re-manufacture this thing into
> > a ARX-2B?
>
> > What would be the advantage? Maybe somebody's used both.
>
> > Thanks,- I was sure somebody out there knew this
>
> > Kevin VE9-XYZ
> > myfamilydot...@hotmail.com
>
> ----------------
>
> I have used the ARX2B with and without the decoupling stubs and didn't
> notice any real difference. Theoretically, the decoupling stubs flatten the
> radiation doughnut which provides better signal toward the horizon. I guess
> I didn't operate many stations that were out there far enough to notice any
> improvement in range. How high the antenna is mounted also plays into the
> range. Mounting it low would probably remove any advantage provided by the
> coax and decoupling stubs.
>
> Ed, NM2K- Hide quoted text -
>
> - Show quoted text -

Even better, you can throw away the top section and run it as an
AR2!!!

1569. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 18:17:07 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190485027.638663.322560@19g2000hsx.googlegroups.com>
Source record: 36199

On 22 Sep, 07:22, "Richard Fry" <r...@adams.net> wrote:
> "art" <aun...@insightbb.com> wrote
>
> >The most efficient radiator is one wave length long where
> >it is considered to be in equilibrium with a parallel electrical
> >cuircuit.
> >For most efficient radiation both the capacitance and the
> >inductance must act as a energy storage such that when
> >the terminals are shorted the energy is released in a burst
> >such that radiation can begin. ... In the case of a fractional
> >wave length radiator the pendulum type radiation is not
> >available for radiation
>
> ----------
>
> Note (for one example of many) that in an antenna system consisting of a
> 1/2-wave, center-fed dipole driven by a matched, balanced transmission line,
> the dipole itself radiates virtually all of the r-f energy present at the
> antenna feedpoint.
>
> The radiation efficiency of a system as in the above example, but using a
> full wave dipole is no better than the 1/2-wave version, other things equal.
> The full wave version just has a different radiation pattern.
>
> RF

1570. Re: Ringo ARX-2 vs ARX-2B - What's the deal?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 18:41:13 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <XkdJi.77311$Lu.55248@bignews8.bellsouth.net>
Source record: 36200

<hot-ham-and-cheese@hotmail.com> wrote in message
news:1190484279.068297.44010@57g2000hsv.googlegroups.com...
> On Sep 22, 2:01 pm, "Ed Cregger" <ecreg...@bellsouff.net> wrote:
>> "Kevin Hastings" <myfamilydot...@hotmail.com> wrote in message
>>
>> news:46f534a8$0$4038$9a566e8b@news.aliant.net...
>>
>>
>>
>>
>>
>> >I bought one of these at a hamfest from a SK's estate and thought it was
>> >a
>> >ARX-2 and then noticed the 52" coax harness attached to it and realized
>> >that it was probably a ARX-2B which seems to be the same except for the
>> >3
>> >radials which I guess didn't get sent to the hamfest.
>>
>> > Reviews of these 2 antennas seem to almost use the 2 model numbers
>> > interchangeably so the question is... Is it worth making up a radial
>> > system and taking another 5 feet of mast to re-manufacture this thing
>> > into
>> > a ARX-2B?
>>
>> > What would be the advantage? Maybe somebody's used both.
>>
>> > Thanks,- I was sure somebody out there knew this
>>
>> > Kevin VE9-XYZ
>> > myfamilydot...@hotmail.com
>>
>> ----------------
>>
>> I have used the ARX2B with and without the decoupling stubs and didn't
>> notice any real difference. Theoretically, the decoupling stubs flatten
>> the
>> radiation doughnut which provides better signal toward the horizon. I
>> guess
>> I didn't operate many stations that were out there far enough to notice
>> any
>> improvement in range. How high the antenna is mounted also plays into the
>> range. Mounting it low would probably remove any advantage provided by
>> the
>> coax and decoupling stubs.

>>
>> Ed, NM2K- Hide quoted text -
>>
>> - Show quoted text -
>
> Even better, you can throw away the top section and run it as an
> AR2!!!
>
>

Don't laugh, I have done that too. Then I did notice a difference in range.

Ed, NM2K

1571. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 18:43:18 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190486598.922907.215230@22g2000hsm.googlegroups.com>
Source record: 36201

On 22 Sep, 07:22, "Richard Fry" <r...@adams.net> wrote:
> "art" <aun...@insightbb.com> wrote
>
> >The most efficient radiator is one wave length long where
> >it is considered to be in equilibrium with a parallel electrical
> >cuircuit.
> >For most efficient radiation both the capacitance and the
> >inductance must act as a energy storage such that when
> >the terminals are shorted the energy is released in a burst
> >such that radiation can begin. ... In the case of a fractional
> >wave length radiator the pendulum type radiation is not
> >available for radiation
>
> ----------
>
> Note (for one example of many) that in an antenna system consisting of a
> 1/2-wave, center-fed dipole driven by a matched, balanced transmission line,
> the dipole itself radiates virtually all of the r-f energy present at the
> antenna feedpoint.
>
> The radiation efficiency of a system as in the above example, but using a
> full wave dipole is no better than the 1/2-wave version, other things equal.
> The full wave version just has a different radiation pattern.
>
> RF

I don't know what your credentials are for you to make such a
statement but it is a free world after all!
A quad radiator is a wave length radiator with a gain more than a half
wave as one sample.
Computor programing confirmes more radiation from full wave antennas
and mathematics according to Maxwell,s rules substantiate it. I can
understand not believing computor programs but I am very interested in
any mathematical data that would support your stand which is contrary
to the mathematics that I and others support.
What you are stating is that an attena in a series cuircit format
produces the same radiation as a parallel or tank cuircuit. I am more
than eager to read the contrary mathematical proof that is contrary to
the mathematics that I hold true. You may have hit on the true
explaqnation of radiation which Einstein, Planck and many others went
to their grave without solving it
Regards
Art KB9MZ.....XG

1572. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 19:22:03 UTC
From: merlin-7 <merlin-7@sc.rr.com>
Message-ID: <46f56bdf$0$26417$4c368faf@roadrunner.com>
Source record: 36202

> SnIp>
> >Even better: If no AC is required but say 12 -14 V-DC , run the receiver
> >from a sealed lead-acid battery and only have a RF earth.
> >
> >If charging from mains ,one could switch-off charging while receiving
> >and only put charger on battery or batteries while transmitting.
>
> Hi Frank,
>
> You are a proponent of one of my suggestions; yes, battery operation
> (as I have as well) solves many issues.
>
> >My complete station runs on 12V batteries (charged by 2 solar panels and
> >a wind gen) ,resulting in NO mains born interference .
> >however when the batteries are on the charger all the time the batteries
> >will probably 'absorb' any mains noise ;
>
I run all my HF gear off of a battery bank...

1- it is cheaper than a power supply in most cases.
2- it works when the power (grid) is down.
3- lower noise problems
4-instant power on demand..ie no real power curve when you key up (most battery(s) (I like yellow top optimas) can pump out several hundred amps for a short time if needed.
http://www.1st-optima-batteries.com/deep_cycle_battery.asp
If you really think about it, there are many reasons to run off of a battery bank. Including emergency communications...and if the battery(s) voltage drops in extended use...there is always a set of jumper cables and a vehicle to charge it up again...

1573. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 19:33:02 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fd3qm5$if9$1@aioe.org>
Source record: 36203

"art" <aunwin@insightbb.com> wrote
> A quad radiator is a wave length radiator with a gain more
> than a half wave as one sample.

In your first post you wrote, "The most efficient radiator is one wave length long where it is considered to be in equilibrium with a parallel electrical cuircuit," and that is what I responded to.

Now you are writing about gain. Efficiency and gain are not synonymous.

Both of the dipole antennas in my previous post will radiate nearly 100% of the r-f energy available from a matched, balanced source connected to their input terminals. Therefore the radiation efficiency of those two configurations does not favor the 1-wave over the 1/2-wave, which was your opening premise.

They won't have the same gains in every direction, because their radiation patterns are different. Same for your quad and "half wave" example.

RF

1574. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 19:37:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fd3qu1skc1@news.albasani.net>
Source record: 36204

Geoffrey S. Mendelson wrote:

> ...
> Some hams have been boycotting Google since then.
>
> Geoff,
>

When you do "something" as good as Google does it, you can boycott until
hell freezes over--yawn! :-)

Regards,
JS

1575. Re: Ringo ARX-2 vs ARX-2B - What's the deal?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 20:07:23 UTC
From: gb <w9nogbspam@arrlspamno.net>
Message-ID: <fd2dnUMvX5hi6GjbnZ2dnUVZ_qmlnZ2d@comcast.com>
Source record: 36205

"Kevin Hastings" <myfamilydotcom@hotmail.com> wrote in message
news:46f534a8$0$4038$9a566e8b@news.aliant.net...
>I bought one of these at a hamfest from a SK's estate and thought it was a
>ARX-2 and then noticed the 52" coax harness attached to it and realized
>that it was probably a ARX-2B which seems to be the same except for the 3
>radials which I guess didn't get sent to the hamfest.
>
> Reviews of these 2 antennas seem to almost use the 2 model numbers
> interchangeably so the question is... Is it worth making up a radial
> system and taking another 5 feet of mast to re-manufacture this thing into
> a ARX-2B?
>
> What would be the advantage? Maybe somebody's used both.
>
> Thanks,- I was sure somebody out there knew this
>
> Kevin VE9-XYZ
> myfamilydotcom@hotmail.com
>

You can also order those missing parts directly from Cushcraft.
I would suggest -- before the snow flies -- if you want it up and operating
before winter.

gb

1576. Re: Ringo ARX-2 vs ARX-2B - What's the deal?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 20:42:37 UTC
From: nm5k@wt.net
Message-ID: <1190493757.733175.213400@n39g2000hsh.googlegroups.com>
Source record: 36206

On Sep 22, 10:28 am, "Kevin Hastings" <myfamilydot...@hotmail.com>
wrote:
> I bought one of these at a hamfest from a SK's estate and thought it was a
> ARX-2 and then noticed the 52" coax harness attached to it and realized that
> it was probably a ARX-2B which seems to be the same except for the 3 radials
> which I guess didn't get sent to the hamfest.
>
> Reviews of these 2 antennas seem to almost use the 2 model numbers
> interchangeably so the question is... Is it worth making up a radial
> system and taking another 5 feet of mast to re-manufacture this thing into a
> ARX-2B?

Absolutely.
>
> What would be the advantage? Maybe somebody's used both.

Yep, I had a ARX-2 which I converted to a 2B. I did tests to see
the difference. It was large.
What the deal is... That extra section is mainly a decoupling device.
This decouples the antenna from the feedline, which can skew the
pattern upwards off the horizon. Gain is useless if it's pointing
towards Jupiter...
You don't need any more mast per say. The radial set clamps
to the existing mast you are using now. The 50 inch coax
section connects from the feedpoint to that radial set.
I made all the parts to convert mine myself but I imagine you
can order them from cushcraft.
MK

1577. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 21:55:31 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99B450A2BC81Dnonenowhere@61.9.191.5>
Source record: 36207

"Dave" <db5151@hotmail.com> wrote in
news:13f6pjqgnk900a2@corp.supernews.com:

...
> were easy to install. Seems I read somewhere that contrary to
> conventional wisdom, the shield on a shielded loop doesn't actually
> shield at all, but becomes the antenna element. Anyone know anything
> about that line of thought? I obviously know nothing, and am trying
> to learn. Just don't know where to focus my energies.

I have written a simple explanation on the operation of the so called
'shielded loop' at http://www.vk1od.net/shieldedloop/index.htm .

You may find the article of interest.

If you read and understand the content of the article, you will see the
pitfalls in using tape to 'shield' a loop.

Owen

1578. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 22:40:47 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190500847.614522.24760@r29g2000hsg.googlegroups.com>
Source record: 36208

On 22 Sep, 12:33, "Richard Fry" <r...@adams.net> wrote:
> "art" <aun...@insightbb.com> wrote
>
> > A quad radiator is a wave length radiator with a gain more
> > than a half wave as one sample.
>
> In your first post you wrote, "The most efficient radiator is one wave
> length long where it is considered to be in equilibrium with a parallel
> electrical cuircuit," and that is what I responded to.
>
> Now you are writing about gain. Efficiency and gain are not synonymous.
>
> Both of the dipole antennas in my previous post will radiate nearly 100% of
> the r-f energy available from a matched, balanced source connected to their
> input terminals. Therefore the radiation efficiency of those two
> configurations does not favor the 1-wave over the 1/2-wave, which was your
> opening premise.
>
> They won't have the same gains in every direction, because their radiation
> patterns are different. Same for your quad and "half wave" example.
>
> RF

O.K. I may have muddied things. I hold to the fact that a one
wavelength dipole will always radiate at a higher efficiency than a
1/2 wave dipole. The example I gave as for an instance was a quad
versus a 1/2 wave dipole.
This is readily seen by any operator empirically. Mathematically it is
proven that way also even tho both are in accordance to Maxwell's
laws. You could I suppose compare a series antenna with a parallel
circuit i.e. a tank circuit that could reinforce your point and that
is what I hoped you would come up with to bolster your point without
resorting to a computor program based on Maxwellian laws. There is
much discussion about what creates radiation and I thought you may
have come up with something that we can all learn from. Eventually
even tho the past masters have died some one, possibly you, will
discover that which has eluded all, even quallified scientists with
huge resumes. I am willing to give you a hearing which does not often
happen on this newsgroupAs an aside I suspect that a single quad
element will beat a dipole anyway regardles of what the fields
differences that you point to but again I am very interested in any
mathematics that defends your possition possibly starting witha
parallel versus a series arrangement since it is very clear whatstarts
radiation in the parallelcase but unknown mathematically for the

series circuit.
Very best regards
Art Unwin....KB9MZ

1579. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 22:50:50 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190501450.441753.214590@w3g2000hsg.googlegroups.com>
Source record: 36209

On 22 Sep, 15:40, art <aun...@insightbb.com> wrote:
> On 22 Sep, 12:33, "Richard Fry" <r...@adams.net> wrote:
>
>
>
>
>
> > "art" <aun...@insightbb.com> wrote
>
> > > A quad radiator is a wave length radiator with a gain more
> > > than a half wave as one sample.
>
> > In your first post you wrote, "The most efficient radiator is one wave
> > length long where it is considered to be in equilibrium with a parallel
> > electrical cuircuit," and that is what I responded to.
>
> > Now you are writing about gain. Efficiency and gain are not synonymous.
>
> > Both of the dipole antennas in my previous post will radiate nearly 100% of
> > the r-f energy available from a matched, balanced source connected to their
> > input terminals. Therefore the radiation efficiency of those two
> > configurations does not favor the 1-wave over the 1/2-wave, which was your
> > opening premise.
>
> > They won't have the same gains in every direction, because their radiation
> > patterns are different. Same for your quad and "half wave" example.
>
> > RF
>
> O.K. I may have muddied things. I hold to the fact that a one
> wavelength dipole will always radiate at a higher efficiency than a
> 1/2 wave dipole. The example I gave as for an instance was a quad
> versus a 1/2 wave dipole.
> This is readily seen by any operator empirically. Mathematically it is
> proven that way also even tho both are in accordance to Maxwell's
> laws. You could I suppose compare a series antenna with a parallel
> circuit i.e. a tank circuit that could reinforce your point and that
> is what I hoped you would come up with to bolster your point without
> resorting to a computor program based on Maxwellian laws. There is
> much discussion about what creates radiation and I thought you may
> have come up with something that we can all learn from. Eventually
> even tho the past masters have died some one, possibly you, will
> discover that which has eluded all, even quallified scientists with
> huge resumes. I am willing to give you a hearing which does not often

> happen on this newsgroupAs an aside I suspect that a single quad
> element will beat a dipole anyway regardles of what the fields
> differences that you point to but again I am very interested in any
> mathematics that defends your possition possibly starting witha
> parallel versus a series arrangement since it is very clear whatstarts
> radiation in the parallelcase but unknown mathematically for the
> series circuit.
> Very best regards
> Art Unwin....KB9MZ- Hide quoted text -
>
> - Show quoted text -

Wait a minuit! you stated that a half wave antenna was nearly 100%
efficient and therein may be the true answer
A quad is often considered as two dipoles even tho there is only one
feed point thus efficiency per unit!Then one can refer to efficiency
per unit length. Is that your point?
Art

1580. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 23:02:27 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fd46ug$io3$1@aioe.org>
Source record: 36210

"art" <aun*@insightbb.com> wrote
> O.K. I may have muddied things. I hold to the fact that a one
> wavelength dipole will always radiate at a higher efficiency than a
> 1/2 wave dipole.

Please post your definition of "efficiency," in this context.

RF

1581. Re: Ringo ARX-2 vs ARX-2B - What's the deal?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 23:43:17 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1190504597.970703.236570@r29g2000hsg.googlegroups.com>
Source record: 36211

On Sep 22, 3:41 pm, "Ed Cregger" <ecreg...@bellsouff.net> wrote:
> <hot-ham-and-che...@hotmail.com> wrote in message
>
> news:1190484279.068297.44010@57g2000hsv.googlegroups.com...
>
>
>
>
>
> > On Sep 22, 2:01 pm, "Ed Cregger" <ecreg...@bellsouff.net> wrote:
> >> "Kevin Hastings" <myfamilydot...@hotmail.com> wrote in message
> >
> >>news:46f534a8$0$4038$9a566e8b@news.aliant.net...
> >
> >> >I bought one of these at a hamfest from a SK's estate and thought it was
> >> >a
> >> >ARX-2 and then noticed the 52" coax harness attached to it and realized
> >> >that it was probably a ARX-2B which seems to be the same except for the
> >> >3
> >> >radials which I guess didn't get sent to the hamfest.
> >
> >> > Reviews of these 2 antennas seem to almost use the 2 model numbers
> >> > interchangeably so the question is... Is it worth making up a radial
> >> > system and taking another 5 feet of mast to re-manufacture this thing
> >> > into
> >> > a ARX-2B?
> >
> >> > What would be the advantage? Maybe somebody's used both.
> >
> >> > Thanks,- I was sure somebody out there knew this
> >
> >> > Kevin VE9-XYZ
> >> > myfamilydot...@hotmail.com
> >
> >> ----------------
> >
> >> I have used the ARX2B with and without the decoupling stubs and didn't
> >> notice any real difference. Theoretically, the decoupling stubs flatten
> >> the
> >> radiation doughnut which provides better signal toward the horizon. I
> >> guess
> >> I didn't operate many stations that were out there far enough to notice
> >> any
> >> improvement in range. How high the antenna is mounted also plays into the

> >> range. Mounting it low would probably remove any advantage provided by
> >> the
> >> coax and decoupling stubs.
>
> >> Ed, NM2K- Hide quoted text -
>
> >> - Show quoted text -
>
> > Even better, you can throw away the top section and run it as an
> > AR2!!!
>
> -----------------
>
> Don't laugh, I have done that too. Then I did notice a difference in range.
>
> Ed, NM2K-

I was given an Arx2 on Guam. Looked as if it had gone through
numerous typhoons, and was missing the hairpin match. Not having a
manual or anything (and pre-internet), I fiddled with a piece of
copper wire until I got tired of it. So I gave it to a fellow ham,
who unscrewed the top section and threw it away. It matched just fine
with only the ring at the bottom.

1582. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-22 23:47:00 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190504820.894306.250850@r29g2000hsg.googlegroups.com>
Source record: 36212

On 22 Sep, 16:02, "Richard Fry" <r...@adams.net> wrote:
> "art" <a...@insightbb.com> wrote> O.K. I may have muddied things. I hold to the fact that a one
> > wavelength dipole will always radiate at a higher efficiency than a
> > 1/2 wave dipole.
>
> _________
>
> Please post your definition of "efficiency," in this context.
>
> RF

Power in vs power out of a system. I know how to do this for a
parallel circuit ala
a tank circuit where energy is released in equilibrium fashion. For a
half wave dipole
you can't have two energy containers so you may or may not be heading
for excess end effects because of high voltage looking for where it
has to go. (Personally I don't know how a half wave radiates because
that form vuews the cyclic current continually radiating as the time
variant which is contrary to all other radiations i.e. a spark plug,
ahydregen bomb which is a bigger container that a flyback transformer
and a bigger container will always beat a small container with respect
to out going accelleration of energy, particles or plasma which ever
you may prefer)without any known proof.I believe that is why the quad
was designed to get away from the spark plug type emmissions at the
ends of the radiator.
On the other side of the coin, since both a quad and a 1/2 wave dipole
is assumed to be suitable drivers for a yagi array both must be bi
directional so gain is applicable when comparing these radiators I
would would think!
Best regards
Art

1583. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 02:18:24 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190513904.198192.24760@19g2000hsx.googlegroups.com>
Source record: 36213

On 22 Sep, 16:47, art <aun...@insightbb.com> wrote:
> On 22 Sep, 16:02, "Richard Fry" <r...@adams.net> wrote:
>
> > "art" <a...@insightbb.com> wrote> O.K. I may have muddied things. I hold to the fact that a one
> > > wavelength dipole will always radiate at a higher efficiency than a
> > > 1/2 wave dipole.
>
> > _________
>
> > Please post your definition of "efficiency," in this context.
>
> > RF
>
> Power in vs power out of a system. I know how to do this for a
> parallel circuit ala
> a tank circuit where energy is released in equilibrium fashion. For a
> half wave dipole
> you can't have two energy containers so you may or may not be heading
> for excess end effects because of high voltage looking for where it
> has to go. (Personally I don't know how a half wave radiates because
> that form vuews the cyclic current continually radiating as the time
> variant which is contrary to all other radiations i.e. a spark plug,
> ahydregen bomb which is a bigger container that a flyback transformer
> and a bigger container will always beat a small container with respect
> to out going accelleration of energy, particles or plasma which ever
> you may prefer)without any known proof.I believe that is why the quad
> was designed to get away from the spark plug type emmissions at the
> ends of the radiator.
> On the other side of the coin, since both a quad and a 1/2 wave dipole
> is assumed to be suitable drivers for a yagi array both must be bi
> directional so gain is applicable when comparing these radiators I
> would would think!
> Best regards
> Art

Richard , I have been reviewing antenna fundamentals as per the
engineering
handbook by Jasik second edition where it states
"The method of computing radiation patterns foir thin linear radiators
is basic regardless of length or complexity of shape " if one assumes
that the current from point to point is sinosoidal. This statment is
consistent with the present assumption that the time variant current
is sinosoidal at every point along the length of the antenna.

Well I have clearly shown for a parallel circuit you cannot pursue this assumption anymore even tho the books state otherwise. The books are not incorrect if the mathematics produced by such a assumption is correct which mathematicians often do when there is an absence of knoweledge to the contrary. What I am declaring is the tank circuit ala parallel circuit which demands a full wave length antenna is the most efficient because the assumption by mathematicians is incorrect. Following Gauss's laws for static and enlarging the format to a dinamic situation i.e. time varient then the demand is for a arrangement in "equilibrium" which cannot be attained with anything other that a full wave length. Following this logic mathematically it concurrs with Maxwells laws and any computor program will move away from any half wave radiator if you ask for maximum gain and allow it to computeaway from a planar arrangement under Maxwells laws.(By the way I always refer to a full wavelength radiator which by no means infers
a center feed. In my case I usually follow the end fed aproach because of a dual windings but in opposite directions)
If Maxwell had in his portfolio an expanded Gaussuian law for making his jigsaw complete the overall picture would have been completed in no time. Unfortunately he did not have this at hand but instead used Faraday and others input
to arrive at the correct answer but with gaps in the info provided. It is for that reason I persued this analogy which is new and contrary with existing assumptions even tho the eventual answers are the same. BUT the analogy of assumption of time varient current of itself produces radiation is incorrect at least for a parallel circuit, aspark plug with a flyback transformer or even the emmisions of a nuclear explosion. I don't think there is a need to dither on the subject anymore since nobody knows how a fractional wavelength antenna really works whereas I am promoting a view of an arrangement in equilibrium and the commonly used approach by Gauss and others with respect to a closed arbitary field. Enjoyed the discussion tho, very thought provoking.
Regards
Art
antennas

1584. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 02:19:18 UTC
From: nm5k@wt.net
Message-ID: <1190513958.923646.258970@57g2000hsv.googlegroups.com>
Source record: 36214

On Sep 22, 5:40 pm, art <aun...@insightbb.com> wrote:

>
> O.K. I may have muddied things. I hold to the fact that a one
> wavelength dipole will always radiate at a higher efficiency than a
> 1/2 wave dipole.

If it does, I doubt it's enough to measure on the air..

>The example I gave as for an instance was a quad
> versus a 1/2 wave dipole.
> This is readily seen by any operator empirically.

I've never seen it here. For that reason, I hardly use loops.
Neither vertically oriented, or horizontal as for NVIS use.
I don't see them as worth the extra trouble. Being I tested
them on 75m using NVIS paths, a noticable difference in
efficiency should have been readily apparent. It wasn't.
In fact, I usually has slightly better performance using the
dipoles, which I think was due to the bulk of the max current
portions of the antenna being higher above ground in general.
The loop sagged a bit in areas, and wasn't all that high above
ground. The more wire near the ground, the more ground loss
in general.

>Mathematically it is
> proven that way also even tho both are in accordance to Maxwell's
> laws.

Where is the math? You should find a very slight difference
at best..
It's common knowledge that even a short piece of wire 1/10
of a wave long will radiate nearly all the power that is applied
to it.
You can go lots shorter than that if you want.
If even a short piece of wire will radiate nearly all the power
applied to it, what is the point on harping about some magical
properties of a full wave length of wire?
Art, you are starting to bark at the moon I'm afraid...

I was going to comment on some of your other posts, but I
think I'll spare you the increase in blood pressure.
All I can say is that you are starting to wander off in
mumbo jumbo land again..
Replacing known science with conjured mumbo jumbo is no
way to live.

MK

1585. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 02:29:08 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <UbkJi.166945$zz2.102710@newsfe12.phx>
Source record: 36215

"Geoffrey S. Mendelson" <gsm@mendelson.com> wrote in message
news:slrnffal6b.9je.gsm@cable.mendelson.com...
> Sal M. Onella wrote:
> > I imagine I should infer something from your question but, no, nothing.
I
> > asked Google for "BPL" and scanned the results but still nothing came to
> > mind. What's up?
>
> Google invested $100,000,000 in Current Communications.
>
> Some hams have been boycotting Google since then.
>
> Geoff,

Got it. TKS

However, I'm afraid the effect of hams boycotting Google would be
negligible. Our strength lies in our ability to lobby the governement.
Does this carry enough weight, compared to the dollar-power influence of a
big company? I don't know. I'd like to think there are still government
officials who are uncorrupted.

"Sal"

1586. Re: coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 02:55:35 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <tekbf39rqj7qn1eqb8195vglkl6codd1pj@4ax.com>
Source record: 36216

On Sat, 22 Sep 2007 08:14:58 -0700, art <aunwin@insightbb.com> wrote:

>On 15 Sep, 19:16, WillW...@gmail.com wrote:
>> I have built several coaxial dipole antennas in the past with great
>> success. What I like about this antenna is it is broadbanded. If you
>> design it using the center of the band of your interest, for the most
>> part you can cover the entire band without retuning. The problem I
>> have always had with this is the antenna is somewhat fragile. I have
>> used plexiglass squares to secure the center of the antenna and taped
>> nylon fishing line to the legs for more strengh. Any one with more
>> ideas? These are mostly useful in the HF range. You can find the info
>> on designing these athttp://www.amateurradios.info and other places
>> on the net.
>>
>> 73's
>> Bill w5grx
>
>BILL
>The best way of using coax with antennas is by stripping the PVC and
>soaking the braid
>in polyurothane so the clock wise windings are insulated from the
>counter wound windings
>By shorting one end of the braiding you can feed the other end i.e.
>the two different windings
>2where the actual span is somewhat less than a 1/2 wave (calculate
>the true wire length)
>The same can be accomplished by using somewhat less than a full wave
>length folded back on itself
>and directly feed the ends. This arrangement takes the fragility away
>from the span by not feeding at the center
>as well as using the center wire of the coax for mechanical strength.
>This method comes in quite usefull when the need is for a 160 meter
>antenna where you can wind the coax cross wise fashion so the ends for
>feeding finish together.
>This comes out at around 60 turns on a 2 foot former. This method
>gives more gain over 1/2 wave designs in a similar way that a quad or
>loop of one wavelength exceeds others. You can also use a single wire
>instead of coax for cheapness if you wish but ofcourse you like coax
>but this way you can join scraps of coax and solder them together
>without bothering with individual strands. This method by the way does
>not require a ground plane so you may leave the barrel on the ground
>or place it on top of the tower for rotation purposes. You can have a
>lot of fun with this antenna if you can also rotate the axis of the
>barrel by useing two rotators or a combination satelite version.

>Note thatusing a full wave length antenna you achieve tha same
>gains(~ 3db) that a quad obtains over the standard fractional WL
>length radiator(~2db when using single wire). Feed impedance is around
>50/60 ohms resistive and is quite broad banded. The above is based
>around Gausswian formulae that also conforms with Maxwellian laws so
>you can use suitable modeling programs such as AO to derive all
>specifications. The above is subject to possible U.S. patents
>acceptance at this time
>Enjoy
>Regards
>Art
>KB9MZ....XG

Art, I'm curious concerning what kind of mind-enhancing substance you were on when you wrote the above post.
As far as I can tell, this post concerns the coaxial dipole. However, I don't discern any relationship between
your post and the coaxial dipole.

What does "60 turns on a 2 foot former" have to do with the coaxial dipole?

And what is the "barrell" that you can leave on the ground or put on the top of the tower for rotation
purposes? Rotation of an 80-meter dipole with a barrell on the top of the tower? Art, you have been smoking
too much liquid polyurethane in your Gaussian pipe.

Walt, W2DU

1587. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 03:28:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fd4mglqed1@news.albasani.net>
Source record: 36217

Sal M. Onella wrote:

> Got it. TKS
>
> However, I'm afraid the effect of hams boycotting Google would be
> negligible. Our strength lies in our ability to lobby the governement.
> Does this carry enough weight, compared to the dollar-power influence of a
> big company? I don't know. I'd like to think there are still government
> officials who are uncorrupted.
>
> "Sal"

Every Self-Appointed-Guru who got his "Certificate of Guru-ism" from a Cracker Jack box has forecast it is doomed to failure, can't provide the necessary bandwidth, would be easy to "jam", "just won't work, etc., etc.

Let's hope somewhere along the line their claims of doom and gloom bear some small element of truth--so much credibility has been lost by so many, would be a real shame to see 'em lose more (if that is possible!)

This "credibility gap" has seemingly swallowed many whole ...

Regards,
JS

1588. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 03:36:47 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <0vmbf3lvc56a9t9ug1kr89knp88ai3b218@4ax.com>
Source record: 36218

On Sat, 22 Sep 2007 19:19:18 -0700, nm5k@wt.net wrote:

>On Sep 22, 5:40 pm, art <aun...@insightbb.com> wrote:
>
>>
>> O.K. I may have muddied things. I hold to the fact that a one
>> wavelength dipole will always radiate at a higher efficiency than a
>> 1/2 wave dipole.
>
>If it does, I doubt it's enough to measure on the air..
>
>>The example I gave as for an instance was a quad
>> versus a 1/2 wave dipole.
>> This is readily seen by any operator empirically.
>
>I've never seen it here. For that reason, I hardly use loops.
>Neither vertically oriented, or horizontal as for NVIS use.
>I don't see them as worth the extra trouble. Being I tested
>them on 75m using NVIS paths, a noticable difference in
>efficiency should have been readily apparent. It wasn't.
>In fact, I usually has slightly better performance using the
>dipoles, which I think was due to the bulk of the max current
>portions of the antenna being higher above ground in general.
>The loop sagged a bit in areas, and wasn't all that high above
>ground. The more wire near the ground, the more ground loss
>in general.
>
>>Mathematically it is
>> proven that way also even tho both are in accordance to Maxwell's
>> laws.
>
>Where is the math? You should find a very slight difference
>at best..
>It's common knowledge that even a short piece of wire 1/10
>of a wave long will radiate nearly all the power that is applied
>to it.
>You can go lots shorter than that if you want.
>If even a short piece of wire will radiate nearly all the power
>applied to it, what is the point on harping about some magical
>properties of a full wave length of wire?
>Art, you are starting to bark at the moon I'm afraid...
>
>I was going to comment on some of your other posts, but I
>think I'll spare you the increase in blood pressure.

>All I can say is that you are starting to wander off in
>mumbo jumbo land again..
>Replacing known science with conjured mumbo jumbo is no
>way to live.
>MK
>
>
>
>

Art, it distresses me to read the misleading statements you profess to be true in your posts.

There is no difference in the 'efficiencies' between a full-wave and a half-wave dipole. Let's assume the wire
size and conductivity of each dipole is such that we can say they both radiate 98 percent of the power
delivered to them. Let's also say that the same amount of power is delivered to both dipoles. What now is the
difference in the radiation between the two dipoles?

The only difference is in the SHAPE of the radiation patterns--the full-wave dipole will have a somewhat
narrower lobe in the direction broadside to the dipole than that of the half-wave dipole, therefore deriving
slightly more gain IN THAT DIRECTION than that of the half-wave, but with less gain than the half-wave in all
other directions. Consequently, the total integrated power in either radiation pattern will be exactly the
same!!!

If you want to express the mathematics of the conditions I described here according to J.C.Maxwell's
equations, you will find that Maxwell's equations fit the conditions EXACTLY.

Walt, W2DU

1589. FREE-I just found this great website where you can get a FREE Plasma TV This Is NOT a Scam See for Yourself.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 03:39:48 UTC
From: tv692@yahoo.com
Message-ID: <1190518788.924111.12590@r29g2000hsg.googlegroups.com>
Source record: 36219

Get a free TV with no credit card. Follow this link and sign up where
it says Start Here. Then sign up for an offer I recommend ebay (or
FastWeb if it works on your computer) because you don't need to give
them your credit card # or pay anything. If you choose ebay create a
new account and bid 99 cents on something very expensive like an
iphone or ps3 so you are guaranteed to lose.
http://www.plasmas4free.com/default.aspx?r=908393

1590. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 06:44:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13fc2qa5s4n1k98@corp.supernews.com>
Source record: 36220

If you'll look back at some of Art's postings, you'll see that he consistently uses the word "efficiency" in a way that's contrary to the universally accepted definition. His meaning of the word is more like gain, but sometimes including communication effectiveness in some way. In fishing through earlier postings, you'll also see that I implored him many times to either use such words as they're universally understood, or else explicitly define what he means by them. The reason for the requests was to help him communicate what he was trying to say, rather than leave a trail of misunderstanding and confusion. All my requests did, however, was make him intensely angry with me, and no definitions were given or change in usage made. I hope this recent round of requests for clarification will have more effect than I was ever able to accomplish.

Roy Lewallen, W7EL

1591. Re: Ringo ARX-2 vs ARX-2B - What's the deal?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 09:55:42 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46f6380e$0$19624$4c368faf@roadrunner.com>
Source record: 36221

"Ed Cregger" <ecregger@bellsouff.net> wrote in message
news:gTbJi.118049$pu2.33324@bignews1.bellsouth.net...
>
> "Kevin Hastings" <myfamilydotcom@hotmail.com> wrote in message
> news:46f534a8$0$4038$9a566e8b@news.aliant.net...
>>I bought one of these at a hamfest from a SK's estate and thought it was a
>>ARX-2 and then noticed the 52" coax harness attached to it and realized
>>that it was probably a ARX-2B which seems to be the same except for the 3
>>radials which I guess didn't get sent to the hamfest.
>>
>> Reviews of these 2 antennas seem to almost use the 2 model numbers
>> interchangeably so the question is... Is it worth making up a radial
>> system and taking another 5 feet of mast to re-manufacture this thing
>> into a ARX-2B?
>>
>> What would be the advantage? Maybe somebody's used both.
>>
>> Thanks,- I was sure somebody out there knew this
>>
>> Kevin VE9-XYZ
>> myfamilydotcom@hotmail.com
>>
>
> ----------------
>
>
> I have used the ARX2B with and without the decoupling stubs and didn't
> notice any real difference. Theoretically, the decoupling stubs flatten
> the radiation doughnut which provides better signal toward the horizon. I
> guess I didn't operate many stations that were out there far enough to
> notice any improvement in range. How high the antenna is mounted also
> plays into the range. Mounting it low would probably remove any advantage
> provided by the coax and decoupling stubs.
>
> Ed, NM2K
>

Apparently there is a big difference from istallation to installation
without the decoupling mod the 2B provides. Ive heard many varied reports on
how well the -2 performs and what you should do to make it perform well.
Some say metal mast, others insulated mast. Some say install it at X height
others at Y, use a choke in the coax, other say thats the worst thing you
can do. Some praise the antenna others curse it. You should get the idea by
now.

For those who went to the 2B some say its better some say its worse thn the -2, go figure.

Jimmie

1592. Re: Ringo ARX-2 vs ARX-2B - What's the deal?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 10:50:37 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <JxrJi.54993$7e6.32111@bignews4.bellsouth.net>
Source record: 36222

```
"Jimmie D" <GFENDER@carolina.rr.com> wrote in message
news:46f6380e$0$19624$4c368faf@roadrunner.com...
>
> "Ed Cregger" <ecregger@bellsouff.net> wrote in message
> news:gTbJi.118049$pu2.33324@bignews1.bellsouth.net...
>>
>> "Kevin Hastings" <myfamilydotcom@hotmail.com> wrote in message
>> news:46f534a8$0$4038$9a566e8b@news.aliant.net...
>>>I bought one of these at a hamfest from a SK's estate and thought it was
>>>a ARX-2 and then noticed the 52" coax harness attached to it and realized
>>>that it was probably a ARX-2B which seems to be the same except for the 3
>>>radials which I guess didn't get sent to the hamfest.
>>>
>>> Reviews of these 2 antennas seem to almost use the 2 model numbers
>>> interchangeably so the question is... Is it worth making up a radial
>>> system and taking another 5 feet of mast to re-manufacture this thing
>>> into a ARX-2B?
>>>
>>> What would be the advantage? Maybe somebody's used both.
>>>
>>> Thanks,- I was sure somebody out there knew this
>>>
>>> Kevin VE9-XYZ
>>> myfamilydotcom@hotmail.com
>>>
>>
>> ----------------
>>
>>
>> I have used the ARX2B with and without the decoupling stubs and didn't
>> notice any real difference. Theoretically, the decoupling stubs flatten
>> the radiation doughnut which provides better signal toward the horizon. I
>> guess I didn't operate many stations that were out there far enough to
>> notice any improvement in range. How high the antenna is mounted also
>> plays into the range. Mounting it low would probably remove any advantage
>> provided by the coax and decoupling stubs.
>>
>> Ed, NM2K
>>
>
> Apparently there is a big difference from istallation to installation
> without the decoupling mod the 2B provides. Ive heard many varied reports
> on how well the -2 performs and what you should do to make it perform
> well. Some say metal mast, others insulated mast. Some say install it at X
```

> height others at Y, use a choke in the coax, other say thats the worst
> thing you can do. Some praise the antenna others curse it. You should get
> the idea by now.
>
> For those who went to the 2B some say its better some say its worse thn
> the -2, go figure.
>
> Jimmie

Of all of the 2 meter non mobile verticals I have used over the last couple of decades, the ARX2B is my favorite, in spite of my previous comments.

Ed, NM2K

1593. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 13:02:35 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fd5o5hcui1@aioe.org>
Source record: 36223

"art" <aun*@insightbb.com> wrote
> I don't think there is a need to dither on the subject anymore
> since nobody knows how a fractional wavelength antenna
> really works

Read Kraus' "Antennas...," 3rd edition, Section 2-12 and
related text.

1594. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 13:26:16 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190553976.954169.305370@50g2000hsm.googlegroups.com>
Source record: 36224

On 22 Sep, 20:36, Walter Maxwell <w...@w2du.com> wrote:
> On Sat, 22 Sep 2007 19:19:18 -0700, n...@wt.net wrote:
> >On Sep 22, 5:40 pm, art <aun...@insightbb.com> wrote:
>
> >> O.K. I may have muddied things. I hold to the fact that a one
> >> wavelength dipole will always radiate at a higher efficiency than a
> >> 1/2 wave dipole.
>
> >If it does, I doubt it's enough to measure on the air..
>
> >>The example I gave as for an instance was a quad
> >> versus a 1/2 wave dipole.
> >> This is readily seen by any operator empirically.
>
> >I've never seen it here. For that reason, I hardly use loops.
> >Neither vertically oriented, or horizontal as for NVIS use.
> >I don't see them as worth the extra trouble. Being I tested
> >them on 75m using NVIS paths, a noticable difference in
> >efficiency should have been readily apparent. It wasn't.
> >In fact, I usually has slightly better performance using the
> >dipoles, which I think was due to the bulk of the max current
> >portions of the antenna being higher above ground in general.
> >The loop sagged a bit in areas, and wasn't all that high above
> >ground. The more wire near the ground, the more ground loss
> >in general.
>
> >>Mathematically it is
> >> proven that way also even tho both are in accordance to Maxwell's
> >> laws.
>
> >Where is the math? You should find a very slight difference
> >at best..
> >It's common knowledge that even a short piece of wire 1/10
> >of a wave long will radiate nearly all the power that is applied
> >to it.
> >You can go lots shorter than that if you want.
> >If even a short piece of wire will radiate nearly all the power
> >applied to it, what is the point on harping about some magical
> >properties of a full wave length of wire?
> >Art, you are starting to bark at the moon I'm afraid...
>
> >I was going to comment on some of your other posts, but I
> >think I'll spare you the increase in blood pressure.
> >All I can say is that you are starting to wander off in

> >mumbo jumbo land again..
> >Replacing known science with conjured mumbo jumbo is no
> >way to live.
> >MK
>
> Art, it distresses me to read the misleading statements you profess to be true in your posts.
>
> There is no difference in the 'efficiencies' between a full-wave and a half-wave dipole. Let's assume the wire
> size and conductivity of each dipole is such that we can say they both radiate 98 percent of the power
> delivered to them. Let's also say that the same amount of power is delivered to both dipoles. What now is the
> difference in the radiation between the two dipoles?
>
>snip

Walt. I have no problem with Maxwells laws but I do have a problem
with a mathematical stunt to measure radiation
of a half wave dipole based on one having to accept that at all points
on the radiator the current is sinosoidal.
There is no distinct analysis with the specifics of radiation. period.
Using a parallel circuity ala tank circuit
insights are produced that radiation is created by the shorted energy
containers of capacitance and inductance which is an intrinsic part of
any radiator in distributed form. The tank circuit is well documented.
So the question now becomes, at least for full understanding of
radiation is how does a half wave radiator follow the format shown by
a
spark plug with a flyback transformer or a full wave radiator or even
the blast from a nuclear bomb?
Yes, a half wave antenna also has distributed inductance and
capacitance energy containers but how is the mechanism
shown by the tank circuit implimented when the arrangement is not in
equilibrium?
Now I think I know what happens but I am interested in contrary
thoughts from those skilled in the arts without the
retoric. As an aside, why does computor programs drift away from
planar form radiators as well to full wave radiators
when the computor is asked to compute for maximum gain? Is this like
the quadratic equation with four answers where you get to determine
the imaginary answers? I would suggest for starters those that are
skilled in the art quantify the energy used for end effect radiation
either in the normal atmosphere or in the rarified atmosphere of Quito
Equador when Tesla type emmissions are visable? Without assumptions
ofcourse!!!!

Regards
Art

1595. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 13:37:47 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <M_tJi.491$hI7.131@newssvr17.news.prodigy.net>
Source record: 36225

art wrote:
> I hold to the fact that a one
> wavelength dipole will always radiate at a higher efficiency than a
> 1/2 wave dipole.

What if the 1/2 wave dipole was made of super-conducting
material, i.e. zero loss except for radiation?
--
73, Cecil http://www.w5dxp.com

1596. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 14:29:33 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46f6788f$0$11061$4c368faf@roadrunner.com>
Source record: 36226

"art" <aunwin@insightbb.com> wrote in message
news:1190486598.922907.215230@22g2000hsm.googlegroups.com...
> On 22 Sep, 07:22, "Richard Fry" <r...@adams.net> wrote:
>> "art" <aun...@insightbb.com> wrote
>>
>> >The most efficient radiator is one wave length long where
>> >it is considered to be in equilibrium with a parallel electrical
>> >cuircuit.
>> >For most efficient radiation both the capacitance and the
>> >inductance must act as a energy storage such that when
>> >the terminals are shorted the energy is released in a burst
>> >such that radiation can begin. ... In the case of a fractional
>> >wave length radiator the pendulum type radiation is not
>> >available for radiation
>>
>> ----------
>>
>> Note (for one example of many) that in an antenna system consisting of a
>> 1/2-wave, center-fed dipole driven by a matched, balanced transmission
>> line,
>> the dipole itself radiates virtually all of the r-f energy present at the
>> antenna feedpoint.
>>
>> The radiation efficiency of a system as in the above example, but using a
>> full wave dipole is no better than the 1/2-wave version, other things
>> equal.
>> The full wave version just has a different radiation pattern.
>>
>> RF
>
> I don't know what your credentials are for you to make such a
> statement but it is a free world after all!
> A quad radiator is a wave length radiator with a gain more than a half
> wave as one sample.
> Computor programing confirmes more radiation from full wave antennas
> and mathematics according to Maxwell,s rules substantiate it. I can
> understand not believing computor programs but I am very interested in
> any mathematical data that would support your stand which is contrary
> to the mathematics that I and others support.
> What you are stating is that an attena in a series cuircit format
> produces the same radiation as a parallel or tank cuircuit. I am more
> than eager to read the contrary mathematical proof that is contrary to
> the mathematics that I hold true. You may have hit on the true
> explaqnation of radiation which Einstein, Planck and many others went

> to their grave without solving it
> Regards
> Art KB9MZ.....XG
>

I dont know his credentials either but Richard is absolutly correct.
Efficency is the ability to radiate the signal and not turn it into
infra-red energy and has nothing to do with gain.

The Math:
Efficiency = (power applied to the antenna system - power turned into heat
by the antenna system)/power applied to the antenna system.

Doesnt take a computer, doesnt take Maxwell or Einstien to explain. 5th
grade math works pretty well in this case.

The best thing the OP can do for his existing antenna is install a good
ground system and impedance matching networks, antenna tuner. If I were
really serious about it I would invest in an antenna analyzer so I would
know when my antenna is tuned for optimum match to my radio and log the
settings of my tuner. With the ground system and antenna type he has I am
sure the ground resistance is soaking up most of his signal. He would surely
benifit from improving his ground system.

Jimmie

1597. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 16:18:56 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190564336.204834.191580@g4g2000hsf.googlegroups.com>
Source record: 36227

On 23 Sep, 07:29, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1190486598.922907.215230@22g2000hsm.googlegroups.com...
>
>
>
>
>
> > On 22 Sep, 07:22, "Richard Fry" <r...@adams.net> wrote:
> >> "art" <aun...@insightbb.com> wrote
>
> >> >The most efficient radiator is one wave length long where
> >> >it is considered to be in equilibrium with a parallel electrical
> >> >cuircuit.
> >> >For most efficient radiation both the capacitance and the
> >> >inductance must act as a energy storage such that when
> >> >the terminals are shorted the energy is released in a burst
> >> >such that radiation can begin. ... In the case of a fractional
> >> >wave length radiator the pendulum type radiation is not
> >> >available for radiation
>
> >> __________
>
> >> Note (for one example of many) that in an antenna system consisting of a
> >> 1/2-wave, center-fed dipole driven by a matched, balanced transmission
> >> line,
> >> the dipole itself radiates virtually all of the r-f energy present at the
> >> antenna feedpoint.
>
> >> The radiation efficiency of a system as in the above example, but using a
> >> full wave dipole is no better than the 1/2-wave version, other things
> >> equal.
> >> The full wave version just has a different radiation pattern.
>
> >> RF
>
> > I don't know what your credentials are for you to make such a
> > statement but it is a free world after all!
> > A quad radiator is a wave length radiator with a gain more than a half
> > wave as one sample.
> > Computor programing confirmes more radiation from full wave antennas
> > and mathematics according to Maxwell,s rules substantiate it. I can
> > understand not believing computor programs but I am very interested in

> > any mathematical data that would support your stand which is contrary
> > to the mathematics that I and others support.
> > What you are stating is that an attena in a series cuircit format
> > produces the same radiation as a parallel or tank cuircuit. I am more
> > than eager to read the contrary mathematical proof that is contrary to
> > the mathematics that I hold true. You may have hit on the true
> > explaqnation of radiation which Einstein, Planck and many others went
> > to their grave without solving it
> > Regards
> > Art KB9MZ.....XG
>
> I dont know his credentials either but Richard is absolutly correct.
> Efficency is the ability to radiate the signal and not turn it into
> infra-red energy and has nothing to do with gain.
>
> The Math:
> Efficiency = (power applied to the antenna system - power turned into heat
> by the antenna system)/power applied to the antenna system.
>
> Doesnt take a computer, doesnt take Maxwell or Einstien to explain. 5th
> grade math works pretty well in this case.
>
> The best thing the OP can do for his existing antenna is install a good
> ground system and impedance matching networks, antenna tuner. If I were
> really serious about it I would invest in an antenna analyzer so I would
> know when my antenna is tuned for optimum match to my radio and log the
> settings of my tuner. With the ground system and antenna type he has I am
> sure the ground resistance is soaking up most of his signal. He would surely
> benifit from improving his ground system.
>
> Jimmie- Hide quoted text -
>
> - Show quoted text -

In comparing two antennas with similar omni direction radiation field
I state that gain in the field is indicative of increased radiadion
but that is a side issue brought up as often is in this newsgroup in
tha absence of a point by point debate. That method of responding is
pretty much used by all polititions. If you state what you THINK makes
the "best antenna" from accurate empirical data then I have no problem
with what you say, I just don't agree with it.
I say that because you focussed on drive or feed impedance when it is
well known that a matching impedand does not infer we have a matching
impedance in the system. Am illustration of the point. The new touted
antenna from Rohd
island university proclames a shortened antenna with a 52 ohm matching
impedance. Since a half wave antenna is not in equilibrium the energy
for themissing half must go somewhere. In the case of the new antenbna
the extra energy went back into the feed line and possibly could have
radiated from there and not the antenna. The ground plane that you put

forward infers that the ground plane is the other half of a equivalent full wave dipole, and it may well be if one can say that the ground plane radiates and prevents the ground wasting the energy. Personally I don't believe that ground radials radiate but that is O.K. So how is this new fangled antenna corrected to radiating efficiently.
How is that done? The antenna uses an inductive turnsfor shortening a antena thatis not in equilibrium so to bring it into equilibrium you add a mirror immage of the antenna including the windings and connect the two at the top together with the image antenna wound over the initial antenna such that the extra indunct becomes balanced(not cancelled) and thus one can feed it at the two wire extremities. Now you have no end effects energy losses and the circulating current has no need to find a way to balance the circuit by seeking the ground or backtracking up the feed line.It takes no time at all to prove this with a small home made antenna and it is that what I was sugesting from the beginning. By the way this is exactly what the scientific community has been pursuing with the anttena
therom of merging electrical and magnetic field as well as others. Until now nobody was aware that if Gauss had continued with his static theorem and enlargened it to a dinamic basis more information about radiation would be revealed with consequenct advances as to what creats or starts radiation rather than continueing with a situation founded on a assumption of which there is no proof. The theorem of an extended gaussian logical strategy to bring it into the format of radiation production destroys the present assumptions alluded to both in mathematical term and also in empirical terms without deviation from Maxwells laws with the extra proof that computor programs built around
Maxwells laws also confirms the equilibrium position. Now I have no problem with people that all existing designs are better but for sure industry and the younger generation is not opposed in reviewing perceived improvements since they are not addicted to preventing change. The bottom line is that a person asked for info and it is upto him to choose which he will accept and one should not get into distress if counter information becomes chosen.
Have a great day
Regards
Art KB9MZ

1598. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 16:21:28 UTC
From: ricknj10@hotmail.com
Message-ID: <46f690c7.705218@news.optonline.net>
Source record: 36228

Roy Lewallen wrote:

>If you'll look back at some of Art's postings, you'll see that he
>consistently uses the word "efficiency"

Oh, this thread had me a bit confused. I didn't see where you guys suddenly started taking about efficiency, where did that come from?
Now Roy clears things up for me, it was due to a posting by "Art." See, Art is in my killfile, and my good old newsreader effectively clobbered his post. Art has been in my killfile for months now, permanently, because it always seemed whenever he posted something it resulted in a rash of waste-of-my time replies, of folks trying to straighten him out, and I don't think anyone ever has. So now that this thread has deteriorated..... "Aerial grounding" goes in my killfile. CUL.

So that I don't get flamed too much, I will start a posting on a little project I am working on here, which is incomplete. I am titling it "Beverage antenna, feedline pickup."

Rick K2XT

1599. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 16:24:19 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190564659.852311.104460@k79g2000hse.googlegroups.com>
Source record: 36229

On 23 Sep, 06:37, Cecil Moore <nos...@w5dxp.com> wrote:
> art wrote:
> > I hold to the fact that a one
> > wavelength dipole will always radiate at a higher efficiency than a
> > 1/2 wave dipole.
>
> What if the 1/2 wave dipole was made of super-conducting
> material, i.e. zero loss except for radiation?
> --
> 73, Cecil http://www.w5dxp.com

Can you have a tank circuit without resistance?
Is I sq R now not applicable anymore?
Glad to see you commenting.
Art

1600. Beverage Antenna, Noise pickup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 16:41:08 UTC
From: ricknj10@hotmail.com
Message-ID: <46f69291.1162984@news.optonline.net>
Source record: 36230

I was reading in ON4UNs book, a section about Beverage antennas and decided to do some checking on mine, which is celebrating its ten year anniversary this month.
Mine is 575 feet long, 6 feet high, with sloping ends, oriented NE. Termination is 500 ohms into a ground rod. Feedpoint also has a single ground rod to which is attached a potted matching transformer I got at a hamfest and supposedly designed for this purpose. Feedline is 150 ft of RG8X which is not grounded at the antenna but just lays on the ground in the woods. Now, this is my first and only Beverage and there are times when I am literally amazed at what it can do. It pulled the 3B7 out of the noise and made him armchair copy on 80 meters when he was simply not there through the noise on the 80 m dipole. Now I see why some times there were no stations calling him, and how I was able to get through. I play with it on the BC band to test if it is really directional. I use my 80 meter dipole as a reference. For example during the day, here in NJ WBZ in Boston is nearly inaudible on the dipole but Q5 on the Beverage. The opposite is true for KDKA in Pittsburgh, so I know it is directional, just don't know if it could work better.

In the book they talk about how it is best if the transformer has an isolated winding for the 50 ohm input, rather than a bifilar wound one in which there is dc continuity between all windings. I checked mine and it does have such continuity. So I may be replacing it with a homebrew one shortly, maybe after I get some comments from users of this newsgroup.

Also the article warned of the effect of common mode currents on the shield of the coax degrading the pattern of the antenna so I did a test to see if mine was infected. It involves simply disconnecting the feedline and shorting the end, then checking to see if there are signals to be heard. On mine I did not hear any signals on any ham band, so went to the BC band where I heard a couple signals. One is a broadcaster about ten miles from here. It was audible although the S meter didn't budge. Switched to an 80 meter dipole and it was 20 over 9. So it appears to me that my feedline is quite good, and not picking up much common mode currents, but that is as far as I have gone. I haven't installed any choke nor grounded the feedline out in the vicinity of the Beverage yet. Any opinion, if I would see any difference by putting ina common mode choke there or replacing the transformer?

Rick K2XT

1601. "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 16:46:30 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.09.23.16.46.28.985780@from.qrz.com>
Source record: 36231

I just read the following on one of the mailing lists I subscribe to:

"Quarter wave ground mounted radials are a waste of wire and a hold over from the olden days. Check the antenna handbook, the new philosophy is more and shorter. The thing is that the bulk of the energy from the vertical antenna is near the base of the antenna and this is what you are trying to capture. A quarter wave radial sounds logical but the planet will detune it so a quarter wave means nothing to the current."

What say you all?

1602. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 16:47:11 UTC
From: Dave <noone@nowhere.com>
Message-ID: <jMwJi.3496$1z3.1447@trndny02>
Source record: 36232

we all agree of course!

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in message
news:pan.2007.09.23.16.46.28.985780@from.qrz.com...
>
> I just read the following on one of the mailing lists I subscribe to:
>
> "Quarter wave ground mounted radials are a waste of wire and a hold over
> from the olden days. Check the antenna handbook, the new philosophy is
> more and shorter. The thing is that the bulk of the energy from the
> vertical antenna is near the base of the antenna and this is what you are
> trying to capture. A quarter wave radial sounds logical but the planet
> will detune it so a quarter wave means nothing to the current."
>
> What say you all?
>
>

1603. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 17:07:26 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <f02df31taknvv8757oki5al6rsv7829hq9@4ax.com>
Source record: 36233

On Sat, 22 Sep 2007 19:18:24 -0700, art <aunwin@insightbb.com> wrote:

>Richard , I have been reviewing antenna fundamentals as per the
>engineering
>handbook by Jasik second edition where it states

Equation (1-1)

efficiency = power radiated by antenna / power accepted by antenna

There is absolutely nothing stated here about "Gain" because radiation
is in every direction. An antenna is a passive device, it cannot
exhibit gain. Johnson and Jasik sez: "if one has a lossless antenna,
the directivity and gain are identical."

Equation (1-2): "The total power radiated from the antenna is" the
measurement of radiation intensity in watts/sr in every direction from
an antenna.

Equation (1-4): "Directivity is the measure of the ability of an
antenna to concentrate radiated power in a particular direction."
which is a sub-portion of the total radiation.

We can measure the total power of all radiation (EZNEC provides this);
we can measure the power accepted by an antenna (EZNEC provides this);
we can measure the power in a particular direction (EZNEC provides
this).

>"The method of computing radiation patterns foir thin linear radiators
>is basic regardless of length or complexity of shape "

There is for EVERY length.

>"if one assumes
>that the current from point to point is sinosoidal.

"for the case of a thin half-wave radiator which can be assumed to
have a sinusoidal current distribution"

This statement is NOT about efficiency and it specifically recites
what can be said about:
1. radiation patterns;
2. radiation resistance;
3. "gain" (directivity);
4. input Z.

We, in this group, quite typically express ALL of these qualities for
ANY antenna on the basis of SPECIFIC physical dimensions and

frequency. When we do, there is barely a half dB variation in any answer, and often better when all SPECIFIC physical dimensions and frequency are provided by the claim maker.

As you often fail to provide this SPECIFIC information, then your claims descend into the category of myth and superstition (you can call it hope and desire).

>What I am declaring is the tank circuit
>ala parallel circuit which demands a full wave length antenna is the
>most efficient because the assumption by mathematicians is incorrect.

This is superstition.

This Voodoo can be easily tested. The first part of equation (1-1) from the authors you quote demand you supply the SPECIFIC power accepted by an antenna. You also fail to supply the second part of equation (1-1) that states the SPECIFIC power radiated by the antenna.

Voodoo = 100%

So, to SPECIFIC counter proofs:

A half wave antenna in free space:
length = 33.43 feet
wire diameter = #12 wire
frequency = 14.28127 MHz
input Z = 72.12 ï¿½j0.00 Ohms
Power accepted by antenna = 100W
Power radiated by antenna = 100W
Efficiency = 100%

Absolutely same antenna in free space at its full wavelength frequency:
length = 33.43 feet
wire diameter = #12 wire
frequency = 28.463975 MHz
input Z = 4257 ï¿½j0.00 Ohms
Power accepted by antenna = 100W
Power radiated by antenna = 100W
Efficiency = 100%

BOTH antennas exhibit radiation patterns IDENTICAL to Johnson and Jasik. BOTH antennas exhibit input Zs IDENTICAL to Johnson and Jasik. BOTH antennas exhibit radiation patterns IDENTICAL to Johnson and Jasik. BOTH antennas exhibit radiation resistances IDENTICAL to Johnson and Jasik. BOTH antennas exhibit radiation gain (directivity) IDENTICAL to Johnson and Jasik.

When either of these two are off-center fed the efficiency DOES NOT CHANGE:
Power accepted by antenna = 100W
Power radiated by antenna = 100W

Efficiency = 100%

>nobody knows how a fractional wavelength antenna
>really works

Total ignorance reveals:
Voodoo = 100%

Equation (1-1) and (1-2) are for any size antenna. All of this stuff
is in the FIRST TWO PAGES OF THE BOOK.

On the very first page of "Fundamentals of Antennas"
"If the current distribution on a wire is known ...
then the radiation pattern and the radiated power
can be computed."

Marconi could measure current distribution 100 years ago.

The authors, of course, give treatments for antennas of all sizes,
otherwise the book would only be three pages long.

Arthur, stop coloring the pages with your crayons long enough to try
reading at least these three pages. :-0

73's
Richard Clark, KB7QHC

1604. Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 17:33:14 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190568794.245105.44250@y42g2000hsy.googlegroups.com>
Source record: 36234

For full understanding of how Maxwells laws were generated one has to
check if eny proviso's were written in.
Ffor instance I suspect that there was a proviso for equilibrium in
every law thar Maxwell used for his summation ofr laws there was an
exceptance by all the masters that without equilibrium the who univere
would fall apart.
Some where along the line somebody deviated from this proviso and made
the assumption that at every point on a radiator can be seen as a sino
soidal current that causes radiation because the assumption was needed
to conform with Maxwells laws while ignoring the dictae of the masters
that the laws of the universe is bound by
by equilibrium so the assumption was conncocted to "solve" the 1/2
wave problem. Can anybody versed in the art point to one of the many
laws at his time were not based on equilibrium. In other words did any
of the work he used specifically addres things that were NOT in
equilibrium to justify its use for items not in equilibrium to
substantiate the use of Maxwells laws to derive its function. Being a
mechanical engineer I am not well informed
of all the doings of the masters
TIA
Art KB9MZ

1605. Re: Beverage Antenna, Noise pickup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 17:42:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <cu7df31jk80s1b1banqjdok8ccd0v9s1jq@4ax.com>
Source record: 36235

On Sun, 23 Sep 2007 16:41:08 GMT, ricknj10@hotmail.com (Rick) wrote:

> Any opinion, if I would see any difference by putting ina
>common mode choke there or replacing the transformer?

Hi Rick,

None whatever. Your tests proved your coax was being effectively choked by the proximity of earth. However, this may change with weather and you should repeat your tests throughout the year as the seasons shift. Further, you may gain from the historical data I provide below.

Another test: simply listen to the coax shield (move its connection to the antenna input and leave the center conductor open). Make sure to provide a good ground for your rig (in fact, you should NEVER ground your rig through a coax if your rig has any other path to ground). If your coax is grounded at the antenna site, you should isolate this connection (absolutely nothing connected at the far end).

Sorry for the parentheticals, but ALL grounds should be connected TOGETHER independently of your feedline. This may mean another 725 feet of wire (not always observed, but it is code). However, having said this, it does not follow that you will actually observe any improvement. It could also kill the Beverage action (due to the field being retarded by the earth which gives rise to a sloping, traveling wave).

As no one is probably very well instructed on Beverages (which may include ON4UN because his readers never cite any actual historical data), you may well do to go to the source:
Harold H. Beverage & Anti-static tuned antennas with Chester W. Rice.
''The Barrage Receiver
Using a 10 mile long wire on the ground, they eliminated static originating in the Caribbean that masked European signals. The wire described ran in the opposite direction of their antenna pointing (just as yours) into central Europe.

These tests were performed nearby you (albeit 80 years ago) by RCA. If you live in proximity to a good engineering library, I can supply many inventors' names you would do well to research.

73's
Richard Clark, KB7QHC

1606. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 17:44:09 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <KBxJi.132$sw6.102@nlpi061.nbdc.sbc.com>
Source record: 36236

Rick (W-A-one-R-K-T) wrote:
> "Quarter wave ground mounted radials are a waste of wire and a hold over
> from the olden days. Check the antenna handbook, the new philosophy is
> more and shorter. The thing is that the bulk of the energy from the
> vertical antenna is near the base of the antenna and this is what you are
> trying to capture. A quarter wave radial sounds logical but the planet
> will detune it so a quarter wave means nothing to the current."
>
> What say you all?

The ground does detune ground
mounted radials because the fields are attenuated by the
ground. Twice as many 1/8WL buried radials may work as well
or better than half as many 1/4WL buried radials.
--
73, Cecil http://www.w5dxp.com

1607. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 17:49:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <md9df3dp9hmfvlrotbdohptvgf4vuplgtb@4ax.com>
Source record: 36237

On Sun, 23 Sep 2007 12:46:30 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:
>What say you all?

Hi Rick,

Sounds like the ghost of Reggie.

So, in honor to his aphorisms and homilies, it should be noted that
adding more wire to that which is conducting nearly nothing - is a
waste of wire.

If we are to reduce this to sound-bites, then the taller the radiator,
the longer the radial(s). If I recall Reggie's other homilies
correctly, there should be a one-to-one correlation (length=height).
As far as efficiency goes, the difference between 20 radials and 120
is hardly noticeable on the S-Meter. Real engineers can measure
differences, but they are far and few between (and don't QSO).

73's
Richard Clark, KB7QHC

1608. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 17:50:31 UTC
From: Mike Lucas <w5chr@bellsouth.net>
Message-ID: <gHxJi.118865$pu2.20816@bignews1.bellsouth.net>
Source record: 36238

"Richard Clark" wrote ...
> On Sat, 22 Sep 2007 19:18:24 -0700, art <aunwin@insightbb.com> wrote:
>
>>Richard , I have been reviewing antenna fundamentals as per the
>>engineering
>>handbook by Jasik second edition where it states
>
> Equation (1-1)
>
Massive snip of good stuff
>
> Arthur, stop coloring the pages with your crayons long enough to try
> reading at least these three pages. :-0
>
> 73's
> Richard Clark, KB7QHC

Richard: I love to watch you tilt at windbags!!!!

Mike W5CHR

1609. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 17:53:25 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <js9df3pttvhqg3cu2qn9iu36l0vqojuf3v@4ax.com>
Source record: 36239

On Sun, 23 Sep 2007 10:33:14 -0700, art <aunwin@insightbb.com> wrote:

>one has to
>check if eny proviso's were written in.
>Ffor instance I suspect

Hi Arthru,

Which, of course, means you didn't check. A flash of ignorance is
hardly an ignition point to start a thread with - but it does provide
suitable tender for a flame. :-0

73's
Richard Clark, KB7QHC

1610. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 17:54:44 UTC
From: Dave <noone@nowhere.com>
Message-ID: <ELxJi.3800$Pc3.2400@trndny09>
Source record: 36140

back again art?? still stuck on 'equilibrium'??? 'equilibrium' is a nice catch word. and yes, many 'masters' heartily believed that everything had to be in 'equilibrium' with something or another. but we have come a long way since then. there can be no energy flow between things in equilibrium, and we all know there is energy flowing in antenna elements. if there wasn't they wouldn't radiate. and we can directly measure it with current and voltage probes. so while maybe the static case of coulomb's law may be said to represent 'equilibrium', none of the others needs that... in fact none of the others would exist if everything was in 'equilibrium'. the current, curl, and d/dt parts of the equations are all a representation of non-equilibrium conditions that must exist for those equations to be of any use. so get out of the 19th century and into the 21st and join the rest of us in the understanding of the dynamic world around us!

"art" <aunwin@insightbb.com> wrote in message
news:1190568794.245105.44250@y42g2000hsy.googlegroups.com...
> For full understanding of how Maxwells laws were generated one has to
> check if eny proviso's were written in.
> Ffor instance I suspect that there was a proviso for equilibrium in
> every law thar Maxwell used for his summation ofr laws there was an
> exceptance by all the masters that without equilibrium the who univere
> would fall apart.
> Some where along the line somebody deviated from this proviso and made
> the assumption that at every point on a radiator can be seen as a sino
> soidal current that causes radiation because the assumption was needed
> to conform with Maxwells laws while ignoring the dictae of the masters
> that the laws of the universe is bound by
> by equilibrium so the assumption was conncocted to "solve" the 1/2
> wave problem. Can anybody versed in the art point to one of the many
> laws at his time were not based on equilibrium. In other words did any
> of the work he used specifically addres things that were NOT in
> equilibrium to justify its use for items not in equilibrium to
> substantiate the use of Maxwells laws to derive its function. Being a
> mechanical engineer I am not well informed
> of all the doings of the masters
> TIA
> Art KB9MZ
>

1611. Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 17:55:18 UTC
From: Larry <invalid@invalid.com>
Message-ID: <46f6a883$0$15936$3406c2d1@news.ncia.net>
Source record: 36141

Does anyone know of a commercial 2 meter antenna made for boats? Fresh water exclusively, but this would be mounted on a T-top of a center console which is towed, so it would have to be able to be tilted down just like the VHF marine antenna. Thanks.
--

Larry W1HJF
rapp at lmr dot com

1612. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 17:59:49 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fd69ir$1b7$1@aioe.org>
Source record: 36142

"Rick wrote>
>
> ... What say you all?

Read "Ground Systems as a Factor in Antenna Efficiency" by Brown, Lewis & Epstein of RCA Labs, published in the June, 1937 issue of The Proceedings of the I.R.E.

It proves otherwise.

RF

1613. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 18:29:56 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <1190572196.365216.95750@g4g2000hsf.googlegroups.com>
Source record: 36143

On Sep 23, 11:18 am, art <aun...@insightbb.com> wrote:
> In comparing two antennas with similar omni direction radiation field
> I state that gain in the field is indicative of increased radiadion ...

...yes, but radiation only in limited az/el sectors, at the expense of loss of radiation in the other sectors.

The field gain in a particular direction is due to the change in pattern shape, not an increased radiation efficiency of the "better" antenna.

For the same input power accepted by different antennas, the total power radiated into the volume of space is the same, no matter what the shapes of their respective radiation envelopes.

1614. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 18:45:13 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46f6b42f$0$32484$4c368faf@roadrunner.com>
Source record: 36144

"Walter Maxwell" <walt@w2du.com> wrote in message
news:0vmbf3lvc56a9t9ug1kr89knp88ai3b218@4ax.com...
> On Sat, 22 Sep 2007 19:19:18 -0700, nm5k@wt.net wrote:
>
>>On Sep 22, 5:40 pm, art <aun...@insightbb.com> wrote:
>>
>>>
>>> O.K. I may have muddied things. I hold to the fact that a one
>>> wavelength dipole will always radiate at a higher efficiency than a
>>> 1/2 wave dipole.
>>
>>If it does, I doubt it's enough to measure on the air..
>>
>>>The example I gave as for an instance was a quad
>>> versus a 1/2 wave dipole.
>>> This is readily seen by any operator empirically.
>>
>>I've never seen it here. For that reason, I hardly use loops.
>>Neither vertically oriented, or horizontal as for NVIS use.
>>I don't see them as worth the extra trouble. Being I tested
>>them on 75m using NVIS paths, a noticable difference in
>>efficiency should have been readily apparent. It wasn't.
>>In fact, I usually has slightly better performance using the
>>dipoles, which I think was due to the bulk of the max current
>>portions of the antenna being higher above ground in general.
>>The loop sagged a bit in areas, and wasn't all that high above
>>ground. The more wire near the ground, the more ground loss
>>in general.
>>
>>>Mathematically it is
>>> proven that way also even tho both are in accordance to Maxwell's
>>> laws.
>>
>>Where is the math? You should find a very slight difference
>>at best..
>>It's common knowledge that even a short piece of wire 1/10
>>of a wave long will radiate nearly all the power that is applied
>>to it.
>>You can go lots shorter than that if you want.
>>If even a short piece of wire will radiate nearly all the power
>>applied to it, what is the point on harping about some magical
>>properties of a full wave length of wire?
>>Art, you are starting to bark at the moon I'm afraid...
>>

>>I was going to comment on some of your other posts, but I
>>think I'll spare you the increase in blood pressure.
>>All I can say is that you are starting to wander off in
>>mumbo jumbo land again..
>>Replacing known science with conjured mumbo jumbo is no
>>way to live.
>>MK
>>
>>
>>
>>
>
> Art, it distresses me to read the misleading statements you profess to be
> true in your posts.
>
> There is no difference in the 'efficiencies' between a full-wave and a
> half-wave dipole. Let's assume the wire
> size and conductivity of each dipole is such that we can say they both
> radiate 98 percent of the power
> delivered to them. Let's also say that the same amount of power is
> delivered to both dipoles. What now is the
> difference in the radiation between the two dipoles?
>
> The only difference is in the SHAPE of the radiation patterns--the
> full-wave dipole will have a somewhat
> narrower lobe in the direction broadside to the dipole than that of the
> half-wave dipole, therefore deriving
> slightly more gain IN THAT DIRECTION than that of the half-wave, but with
> less gain than the half-wave in all
> other directions. Consequently, the total integrated power in either
> radiation pattern will be exactly the
> same!!!
>
> If you want to express the mathematics of the conditions I described here
> according to J.C.Maxwell's
> equations, you will find that Maxwell's equations fit the conditions
> EXACTLY.
>
> Walt, W2DU

If any difference at all exist it is that the full wave antenna would be
ever so slightly less efficient due to the ohmic losses of the extra wire.

Jimmie

1615. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 19:02:05 UTC
From: Dave <noone@nowhere.com>
Message-ID: <NKyJi.4501$J03.473@trndny03>
Source record: 36145

"Jimmie D" <GFENDER@carolina.rr.com> wrote in message
news:46f6b42f$0$32484$4c368faf@roadrunner.com...
>
> "Walter Maxwell" <walt@w2du.com> wrote in message
> news:0vmbf3lvc56a9t9ug1kr89knp88ai3b218@4ax.com...
>> On Sat, 22 Sep 2007 19:19:18 -0700, nm5k@wt.net wrote:
>>
>>>On Sep 22, 5:40 pm, art <aun...@insightbb.com> wrote:
>>>
>>>>
>>>> O.K. I may have muddied things. I hold to the fact that a one
>>>> wavelength dipole will always radiate at a higher efficiency than a
>>>> 1/2 wave dipole.
>>>
>>>If it does, I doubt it's enough to measure on the air..
>>>
>>>>The example I gave as for an instance was a quad
>>>> versus a 1/2 wave dipole.
>>>> This is readily seen by any operator empirically.
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>>>I've never seen it here. For that reason, I hardly use loops.
>>>Neither vertically oriented, or horizontal as for NVIS use.
>>>I don't see them as worth the extra trouble. Being I tested
>>>them on 75m using NVIS paths, a noticable difference in
>>>efficiency should have been readily apparent. It wasn't.
>>>In fact, I usually has slightly better performance using the
>>>dipoles, which I think was due to the bulk of the max current
>>>portions of the antenna being higher above ground in general.
>>>The loop sagged a bit in areas, and wasn't all that high above
>>>ground. The more wire near the ground, the more ground loss
>>>in general.
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>>>>Mathematically it is
>>>> proven that way also even tho both are in accordance to Maxwell's
>>>> laws.
>>>
>>>Where is the math? You should find a very slight difference
>>>at best..
>>>It's common knowledge that even a short piece of wire 1/10
>>>of a wave long will radiate nearly all the power that is applied
>>>to it.
>>>You can go lots shorter than that if you want.
>>>If even a short piece of wire will radiate nearly all the power
>>>applied to it, what is the point on harping about some magical

>>>properties of a full wave length of wire?
>>>Art, you are starting to bark at the moon I'm afraid...
>>>
>>>I was going to comment on some of your other posts, but I
>>>think I'll spare you the increase in blood pressure.
>>>All I can say is that you are starting to wander off in
>>>mumbo jumbo land again..
>>>Replacing known science with conjured mumbo jumbo is no
>>>way to live.
>>>MK
>>>
>>>
>>>
>>>
>>
>> Art, it distresses me to read the misleading statements you profess to be
>> true in your posts.
>>
>> There is no difference in the 'efficiencies' between a full-wave and a
>> half-wave dipole. Let's assume the wire
>> size and conductivity of each dipole is such that we can say they both
>> radiate 98 percent of the power
>> delivered to them. Let's also say that the same amount of power is
>> delivered to both dipoles. What now is the
>> difference in the radiation between the two dipoles?
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>> The only difference is in the SHAPE of the radiation patterns--the
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>> narrower lobe in the direction broadside to the dipole than that of the
>> half-wave dipole, therefore deriving
>> slightly more gain IN THAT DIRECTION than that of the half-wave, but with
>> less gain than the half-wave in all
>> other directions. Consequently, the total integrated power in either
>> radiation pattern will be exactly the
>> same!!!
>>
>> If you want to express the mathematics of the conditions I described here
>> according to J.C.Maxwell's
>> equations, you will find that Maxwell's equations fit the conditions
>> EXACTLY.
>>
>> Walt, W2DU
>
> If any difference at all exist it is that the full wave antenna would be
> ever so slightly less efficient due to the ohmic losses of the extra wire.
>
> Jimmie
>
don't claim that until you have modeled it in full. it may actually have
lower currents spread out over the longer wire thus giving smaller I^2*R

losses. consider this 'obvious' case... 1V across 100' of wire that measures 1ohm... draws 1A... power dissipation is 1^2*1 for 1watt.... now i double the length of the wire expecting to get more heat... now there is 1V across 200' of wire, but the resistance is now 2ohms... I is now .5A, .5^2*2 = .5watts. those squared terms will get you every time.

1616. Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 19:34:37 UTC
From: oeguet@gmx.de
Message-ID: <1190576077.731409.75750@n39g2000hsh.googlegroups.com>
Source record: 36146

Has anybody a solution to speedup the NEC-Engine, using multiple CPU-Cores?
In standard use, only one NEC-Engine is running. The NEC-Engine does not use multi-threading technique and therefore only one CPU-Core is running.

Todays computers have multiple cores. Even I am using one with two cores (Intel Dual-Core). And there are more cores available in the future (3,4 and more).

My question is, is threre a solution for speeding up the antenna calculation using NEC2/4-Engine? If not, I plan to code a wrapper NEC-Engine, that is able to busy all CPU-Cores and merging the results to one output file. Especially antenna calculation can be easly divided into multiple parts (eg. radiation pattern division). If there is a solution, I do not want to reinvent the tire again.

Regards,
Aziz

1617. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 20:22:27 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190578947.703641.305560@50g2000hsm.googlegroups.com>
Source record: 36147

On 23 Sep, 10:54, "Dave" <no...@nowhere.com> wrote:
> back again art?? still stuck on 'equilibrium'??? 'equilibrium' is a nice
> catch word. and yes, many 'masters' heartily believed that everything had
> to be in 'equilibrium' with something or another. but we have come a long
> way since then. there can be no energy flow between things in equilibrium,
> and we all know there is energy flowing in antenna elements. if there
> wasn't they wouldn't radiate. and we can directly measure it with current
> and voltage probes. so while maybe the static case of coulomb's law may be
> said to represent 'equilibrium', none of the others needs that... in fact
> none of the others would exist if everything was in 'equilibrium'. the
> current, curl, and d/dt parts of the equations are all a representation of
> non-equilibrium conditions that must exist for those equations to be of any
> use. so get out of the 19th century and into the 21st and join the rest of
> us in the understanding of the dynamic world around us!
>
> "art" <aun...@insightbb.com> wrote in message
>
> news:1190568794.245105.44250@y42g2000hsy.googlegroups.com...
>
>
>
> > For full understanding of how Maxwells laws were generated one has to
> > check if eny proviso's were written in.
> > Ffor instance I suspect that there was a proviso for equilibrium in
> > every law thar Maxwell used for his summation ofr laws there was an
> > exceptance by all the masters that without equilibrium the who univere
> > would fall apart.
> > Some where along the line somebody deviated from this proviso and made
> > the assumption that at every point on a radiator can be seen as a sino
> > soidal current that causes radiation because the assumption was needed
> > to conform with Maxwells laws while ignoring the dictae of the masters
> > that the laws of the universe is bound by
> > by equilibrium so the assumption was conncocted to "solve" the 1/2
> > wave problem. Can anybody versed in the art point to one of the many
> > laws at his time were not based on equilibrium. In other words did any
> > of the work he used specifically addres things that were NOT in
> > equilibrium to justify its use for items not in equilibrium to
> > substantiate the use of Maxwells laws to derive its function. Being a
> > mechanical engineer I am not well informed
> > of all the doings of the masters
> > TIA
> > Art KB9MZ- Hide quoted text -
>
> - Show quoted text -

Well David my checks on books on the subject that revealed that all Maxwells laws
conform to standard boundary conditions. When I started enlarging the static law of statics I was cogniscent of the fact that the same boundary conditions must exist to maintain plausability. This forced me to make sure that the additions within the boundary must not alter the boundary aproach. I could not uset 1/2 wave antennas be3cause that violates the laws laid down by Maxwell in all his laws so I used full wave radiators to continue, after all it xcannot be a law if you have to make asumptions. I applied a time varying field to make it dynamic so that it conforms to Maxwell
laws Thus in effect my aproach should be considerfed law
Now we come back to existing aproaches of present day scientists and they have chosen to ignore the required conditions and in its place started to apply assumption which you are not allowed to do with laws only theories. Scientists and others further violated existing laws ala Maxwells laws which are based upon equiulibrium in all cases and used it where it is not applicable.
Now all computor programs are based around Maxwells LAWS so how come it is used in violation of those same laws?
I followed the boundary laws in my expansion of Gaussian law where the results conform to Maxwell and as I have described earlier the tank cuicuit is the result but without having to make assumptions assumptions because I abided by LAW. At the same time it clearly prooves that asuumptions made by scientists and programmers are clearly in error of itself. Since I like to do things from first principles it was my responserbilty to ask electrical people and those familiar with the state of the art that the principles I used were "not out of date" ie now revised. One response came from a ham with a Doctorate working for MIT. He clearly stated that mathematics support my approach and showed how they were in conformance with Maxwells LAWS. Nobody concurred with his finding and none supplied reasons why except that 'you can't do that'! So until somebody of stature challenges his confirmation I stand my ground. Now W7el is making a living from programs that are applying Maxwells LAWS to items within a boundary that are NOT in equilibrium which is INCORRECT. Others by the way deny the existance
of boundary Laws ala equilibrium as if it does not mean anything.
Ofcourse programmers say I only copied what the government released ala if it is printed in a book it must be correct so perhaps there is a computor programmer around as to why he continous to use erroneos methods for programming with respect to radiators!
Best regards
Art Unwin KB9MZ....XG

1618. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 20:24:06 UTC
From: Dave <db5151@hotmail.com>
Message-ID: <13fdis3731cvdee@corp.supernews.com>
Source record: 36148

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:13f6m8aa143a5c2@corp.supernews.com...
> Trying to phase two antennas that close together at that frequency range
> will be an educational experience at best, but more likely just an
> exercise in frustration unless you have much more patience than average.
> Such an array will be hyper-sensitive to everything. You might be able to
> fleetingly see a null after a lot of tweaking, but I seriously doubt
> you'll even get that. A tiny change in frequency, wiggling of the whips,
> or even movement in the vicinity of the whips will have a profound effect
> on any null you might see.
>
> If a null from a small antenna is what you want, you'd have much better
> luck with a carefully constructed and balanced ("shielded") loop.
>
> Roy Lewallen, W7EL

Quck question, Roy,

Would it matter if I "separated" the whips electrically with, say, 55 feet of coax? (That's approx the length I get for RG-174 coax, which is something like 1/8" in diameter, with a velocity vactor of .66 and working with 9 MHz.) Just a thought, but I don't know whether it has any merit or not. And I am thinking I could adjust that "length" with an RLC circuit through which I sort of "tune" it. What say you? Is this line of thought worth persuing? Or would wiggling he whips still throw everything off?

And I do seem to have a fair abount of patience with this sort of thing. Been working on the current project for about 2 years, had it working on and off, taking it apart occasionally to implement some new retrofit or engineering change. I am on disability, and have nothing but time on my hands.

Thanks for any feedback...

Dave

1619. Re: Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 20:28:40 UTC
From: Bob Baldwin <bob-baldwin@tamu.edu>
Message-ID: <YZzJi.109096$lZ7.27573@newsfe20.lga>
Source record: 36149

Larry wrote:
> Does anyone know of a commercial 2 meter antenna made for boats? Fresh
> water exclusively, but this would be mounted on a T-top of a center
> console which is towed, so it would have to be able to be tilted down
> just like the VHF marine antenna. Thanks.
I just use 1/4 wave whips on mine - one for 2 meters and a longer one
for FM broadcast, mounted on the T-top's antenna mounting plates. Just
something to consider if you cannot find the longer marine antenna that
you're looking for.

73,
bob

1620. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 20:37:14 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190579834.540335.323450@o80g2000hse.googlegroups.com>
Source record: 36150

On 23 Sep, 11:45, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
> "Walter Maxwell" <w...@w2du.com> wrote in message
>
> news:0vmbf3lvc56a9t9ug1kr89knp88ai3b218@4ax.com...
>
>
>
>
>
> > On Sat, 22 Sep 2007 19:19:18 -0700, n...@wt.net wrote:
>
> >>On Sep 22, 5:40 pm, art <aun...@insightbb.com> wrote:
>
> >>> O.K. I may have muddied things. I hold to the fact that a one
> >>> wavelength dipole will always radiate at a higher efficiency than a
> >>> 1/2 wave dipole.
>
> >>If it does, I doubt it's enough to measure on the air..
>
> >>>The example I gave as for an instance was a quad
> >>> versus a 1/2 wave dipole.
> >>> This is readily seen by any operator empirically.
>
> >>I've never seen it here. For that reason, I hardly use loops.
> >>Neither vertically oriented, or horizontal as for NVIS use.
> >>I don't see them as worth the extra trouble. Being I tested
> >>them on 75m using NVIS paths, a noticable difference in
> >>efficiency should have been readily apparent. It wasn't.
> >>In fact, I usually has slightly better performance using the
> >>dipoles, which I think was due to the bulk of the max current
> >>portions of the antenna being higher above ground in general.
> >>The loop sagged a bit in areas, and wasn't all that high above
> >>ground. The more wire near the ground, the more ground loss
> >>in general.
>
> >>>Mathematically it is
> >>> proven that way also even tho both are in accordance to Maxwell's
> >>> laws.
>
> >>Where is the math? You should find a very slight difference
> >>at best..
> >>It's common knowledge that even a short piece of wire 1/10
> >>of a wave long will radiate nearly all the power that is applied
> >>to it.

> >>You can go lots shorter than that if you want.
> >>If even a short piece of wire will radiate nearly all the power
> >>applied to it, what is the point on harping about some magical
> >>properties of a full wave length of wire?
> >>Art, you are starting to bark at the moon I'm afraid...
>
> >>I was going to comment on some of your other posts, but I
> >>think I'll spare you the increase in blood pressure.
> >>All I can say is that you are starting to wander off in
> >>mumbo jumbo land again..
> >>Replacing known science with conjured mumbo jumbo is no
> >>way to live.
> >>MK
>
> > Art, it distresses me to read the misleading statements you profess to be
> > true in your posts.
>
> > There is no difference in the 'efficiencies' between a full-wave and a
> > half-wave dipole. Let's assume the wire
> > size and conductivity of each dipole is such that we can say they both
> > radiate 98 percent of the power
> > delivered to them. Let's also say that the same amount of power is
> > delivered to both dipoles. What now is the
> > difference in the radiation between the two dipoles?
>
> > The only difference is in the SHAPE of the radiation patterns--the
> > full-wave dipole will have a somewhat
> > narrower lobe in the direction broadside to the dipole than that of the
> > half-wave dipole, therefore deriving
> > slightly more gain IN THAT DIRECTION than that of the half-wave, but with
> > less gain than the half-wave in all
> > other directions. Consequently, the total integrated power in either
> > radiation pattern will be exactly the
> > same!!!
>
> > If you want to express the mathematics of the conditions I described here
> > according to J.C.Maxwell's
> > equations, you will find that Maxwell's equations fit the conditions
> > EXACTLY.
>
> > Walt, W2DU
>
> If any difference at all exist it is that the full wave antenna would be
> ever so slightly less efficient due to the ohmic losses of the extra wire.
>
> Jimmie- Hide quoted text -
>
> - Show quoted text -

Give me the proof not a opinion when there are so many .
Art KB9MZ

1621. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 20:43:20 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190580200.010164.125760@r29g2000hsg.googlegroups.com>
Source record: 36151

On 23 Sep, 12:02, "Dave" <no...@nowhere.com> wrote:
> "Jimmie D" <GFEN...@carolina.rr.com> wrote in message
>
> news:46f6b42f$0$32484$4c368faf@roadrunner.com...
>
>
>
>
>
> > "Walter Maxwell" <w...@w2du.com> wrote in message
> >news:0vmbf3lvc56a9t9ug1kr89knp88ai3b218@4ax.com...
> >> On Sat, 22 Sep 2007 19:19:18 -0700, n...@wt.net wrote:
>
> >>>On Sep 22, 5:40 pm, art <aun...@insightbb.com> wrote:
>
> >>>> O.K. I may have muddied things. I hold to the fact that a one
> >>>> wavelength dipole will always radiate at a higher efficiency than a
> >>>> 1/2 wave dipole.
>
> >>>If it does, I doubt it's enough to measure on the air..
>
> >>>>The example I gave as for an instance was a quad
> >>>> versus a 1/2 wave dipole.
> >>>> This is readily seen by any operator empirically.
>
> >>>I've never seen it here. For that reason, I hardly use loops.
> >>>Neither vertically oriented, or horizontal as for NVIS use.
> >>>I don't see them as worth the extra trouble. Being I tested
> >>>them on 75m using NVIS paths, a noticable difference in
> >>>efficiency should have been readily apparent. It wasn't.
> >>>In fact, I usually has slightly better performance using the
> >>>dipoles, which I think was due to the bulk of the max current
> >>>portions of the antenna being higher above ground in general.
> >>>The loop sagged a bit in areas, and wasn't all that high above
> >>>ground. The more wire near the ground, the more ground loss
> >>>in general.
>
> >>>>Mathematically it is
> >>>> proven that way also even tho both are in accordance to Maxwell's
> >>>> laws.
>
> >>>Where is the math? You should find a very slight difference
> >>>at best..
> >>>It's common knowledge that even a short piece of wire 1/10

> >>>of a wave long will radiate nearly all the power that is applied
> >>>to it.
> >>>You can go lots shorter than that if you want.
> >>>If even a short piece of wire will radiate nearly all the power
> >>>applied to it, what is the point on harping about some magical
> >>>properties of a full wave length of wire?
> >>>Art, you are starting to bark at the moon I'm afraid...
>
> >>>I was going to comment on some of your other posts, but I
> >>>think I'll spare you the increase in blood pressure.
> >>>All I can say is that you are starting to wander off in
> >>>mumbo jumbo land again..
> >>>Replacing known science with conjured mumbo jumbo is no
> >>>way to live.
> >>>MK
>
> >> Art, it distresses me to read the misleading statements you profess to be
> >> true in your posts.
>
> >> There is no difference in the 'efficiencies' between a full-wave and a
> >> half-wave dipole. Let's assume the wire
> >> size and conductivity of each dipole is such that we can say they both
> >> radiate 98 percent of the power
> >> delivered to them. Let's also say that the same amount of power is
> >> delivered to both dipoles. What now is the
> >> difference in the radiation between the two dipoles?
>
> >> The only difference is in the SHAPE of the radiation patterns--the
> >> full-wave dipole will have a somewhat
> >> narrower lobe in the direction broadside to the dipole than that of the
> >> half-wave dipole, therefore deriving
> >> slightly more gain IN THAT DIRECTION than that of the half-wave, but with
> >> less gain than the half-wave in all
> >> other directions. Consequently, the total integrated power in either
> >> radiation pattern will be exactly the
> >> same!!!
>
> >> If you want to express the mathematics of the conditions I described here
> >> according to J.C.Maxwell's
> >> equations, you will find that Maxwell's equations fit the conditions
> >> EXACTLY.
>
> >> Walt, W2DU
>
> > If any difference at all exist it is that the full wave antenna would be
> > ever so slightly less efficient due to the ohmic losses of the extra wire.
>
> > Jimmie
>
> don't claim that until you have modeled it in full. it "may"

What does "may" infere? Is it it 'may' or 'may not' or 'I am not sure'
or 'I don't know'?
I am not willing to procede with what you say unless you can be more
difinitive.
What does a house built on sand do?

snip
ragards
Art KB9MZ....XG

1622. Re: Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 20:53:13 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190580793.904740.44760@g4g2000hsf.googlegroups.com>
Source record: 36152

On 23 Sep, 12:34, oeg...@gmx.de wrote:
> Has anybody a solution to speedup the NEC-Engine, using multiple CPU-
> Cores?
> In standard use, only one NEC-Engine is running. The NEC-Engine does
> not use multi-threading technique and therefore only one CPU-Core is
> running.
>
> Todays computers have multiple cores. Even I am using one with two
> cores (Intel Dual-Core). And there are more cores available in the
> future (3,4 and more).
>
> My question is, is threre a solution for speeding up the antenna
> calculation using NEC2/4-Engine? If not, I plan to code a wrapper NEC-
> Engine, that is able to busy all CPU-Cores and merging the results to
> one output file. Especially antenna calculation can be easly divided
> into multiple parts (eg. radiation pattern division). If there is a
> solution, I do not want to reinvent the tire again.
>
> Regards,
> Aziz

Way to go Aziz, programmers are not keeping up with machines
available.
You could make a lot of money with that
Art KB9MZ.....XG

1623. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 21:12:30 UTC
From: Dave <db5151@hotmail.com>
Message-ID: <13fdlms11adgudf@corp.supernews.com>
Source record: 36153

"Dave" <db5151@hotmail.com> wrote in message
news:13fdis3731cvdee@corp.supernews.com...
>
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:13f6m8aa143a5c2@corp.supernews.com...
>> Trying to phase two antennas that close together at that frequency range
>> will be an educational experience at best, but more likely just an
>> exercise in frustration unless you have much more patience than average.
>> Such an array will be hyper-sensitive to everything. You might be able to
>> fleetingly see a null after a lot of tweaking, but I seriously doubt
>> you'll even get that. A tiny change in frequency, wiggling of the whips,
>> or even movement in the vicinity of the whips will have a profound effect
>> on any null you might see.
>>
>> If a null from a small antenna is what you want, you'd have much better
>> luck with a carefully constructed and balanced ("shielded") loop.
>>
>> Roy Lewallen, W7EL
>
> Quck question, Roy,
>
> Would it matter if I "separated" the whips electrically with, say, 55 feet
> of coax? (That's approx the length I get for RG-174 coax, which is
> something like 1/8" in diameter, with a velocity vactor of .66 and working
> with 9 MHz.) Just a thought, but I don't know whether it has any merit or
> not. And I am thinking I could adjust that "length" with an RLC circuit
> through which I sort of "tune" it. What say you? Is this line of thought
> worth persuing? Or would wiggling he whips still throw everything off?
>
> And I do seem to have a fair abount of patience with this sort of thing.
> Been working on the current project for about 2 years, had it working on
> and off, taking it apart occasionally to implement some new retrofit or
> engineering change. I am on disability, and have nothing but time on my
> hands.
>
> Thanks for any feedback...
>
> Dave
>
>

Forgot to mention one thing. Don't know if I said this before or not, but
this is of course for receive only. No transmitting with such a cob job...

Thanks,

Dave

1624. Re: Ringo ARX-2 vs ARX-2B - What's the deal?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 21:16:51 UTC
From: Jim-NN7K
Message-ID: <eJAJi.186$ih1.116@nlpi068.nbdc.sbc.com>
Source record: 36154

Kevin (and others) What the deal is- that the original ARX-2 (not
De-coupled) allows rf to go on the outside sheath of the coax, allowing
it to become part of the antenna system. The decoupleing stub- with
1/4 wave ground plane radials, forces the rf off the coax below
the radials, allowing 2 features- 1) minimizes rf feedback towards the
rig (eliminates rf burns, in high power, and 2) makes the antenna
radiate simetrically (when the coax shield radiates, it distorts the
antenna pattern, both in recieve, and transmit.) Realistically, it
probably makes little difference, overall, but was a sales pitch,
started by AEA, on its Isopole antenna. Was demonstrated at Seattle
ARRL convention side by side- The coax from the (original) ARX-2
would light a lamp on a RF sniffer, held next to the coax-- the ISOPOLE
didn't! Cushcrafts response was the ARX-2B (and a mod kit for the
ARX-2), that eliminated this coax radiation! You can easily duplicate
the effect with 3- 19 inch pieces of aluminium wire, to the mast , held
on with a hose clamp! (dont forget to also attach that coax shield, at
that point!) Jim NN7K

>> news:46f534a8$0$4038$9a566e8b@news.aliant.net...
>>> I bought one of these at a hamfest from a SK's estate and thought it was a
>>> ARX-2 and then noticed the 52" coax harness attached to it and realized
>>> that it was probably a ARX-2B which seems to be the same except for the 3
>>> radials which I guess didn't get sent to the hamfest.
>>>
>>> Reviews of these 2 antennas seem to almost use the 2 model numbers
>>> interchangeably so the question is... Is it worth making up a radial
>>> system and taking another 5 feet of mast to re-manufacture this thing
>>> into a ARX-2B?
>>>
>>> What would be the advantage? Maybe somebody's used both.
>>>
>>> Thanks,- I was sure somebody out there knew this
>>>
>>> Kevin VE9-XYZ

1625. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 21:31:21 UTC
From: Dave <noone@nowhere.com>
Message-ID: <JWAJi.152$yh3.65@trndny01>
Source record: 36155

"art" <aunwin@insightbb.com> wrote in message
news:1190578947.703641.305560@50g2000hsm.googlegroups.com...
> On 23 Sep, 10:54, "Dave" <no...@nowhere.com> wrote:
>> back again art?? still stuck on 'equilibrium'??? 'equilibrium' is a
>> nice
>> catch word. and yes, many 'masters' heartily believed that everything
>> had
>> to be in 'equilibrium' with something or another. but we have come a
>> long
>> way since then. there can be no energy flow between things in
>> equilibrium,
>> and we all know there is energy flowing in antenna elements. if there
>> wasn't they wouldn't radiate. and we can directly measure it with
>> current
>> and voltage probes. so while maybe the static case of coulomb's law may
>> be
>> said to represent 'equilibrium', none of the others needs that... in fact
>> none of the others would exist if everything was in 'equilibrium'. the
>> current, curl, and d/dt parts of the equations are all a representation
>> of
>> non-equilibrium conditions that must exist for those equations to be of
>> any
>> use. so get out of the 19th century and into the 21st and join the rest
>> of
>> us in the understanding of the dynamic world around us!
>>
>> "art" <aun...@insightbb.com> wrote in message
>>
>> news:1190568794.245105.44250@y42g2000hsy.googlegroups.com...
>>
>>
>>
>> > For full understanding of how Maxwells laws were generated one has to
>> > check if eny proviso's were written in.
>> > Ffor instance I suspect that there was a proviso for equilibrium in
>> > every law thar Maxwell used for his summation ofr laws there was an
>> > exceptance by all the masters that without equilibrium the who univere
>> > would fall apart.
>> > Some where along the line somebody deviated from this proviso and made
>> > the assumption that at every point on a radiator can be seen as a sino
>> > soidal current that causes radiation because the assumption was needed
>> > to conform with Maxwells laws while ignoring the dictae of the masters
>> > that the laws of the universe is bound by
>> > by equilibrium so the assumption was conncocted to "solve" the 1/2

>> > wave problem. Can anybody versed in the art point to one of the many
>> > laws at his time were not based on equilibrium. In other words did any
>> > of the work he used specifically addres things that were NOT in
>> > equilibrium to justify its use for items not in equilibrium to
>> > substantiate the use of Maxwells laws to derive its function. Being a
>> > mechanical engineer I am not well informed
>> > of all the doings of the masters
>> > TIA
>> > Art KB9MZ- Hide quoted text -
>>
>> - Show quoted text -
>
> Well David my checks on books on the subject that revealed that all
> Maxwells laws
> conform to standard boundary conditions. When I started enlarging the
> static law of statics I was cogniscent of the fact that the same
> boundary conditions must exist to maintain plausability. This forced
> me to make sure that the additions within the boundary must not alter
> the boundary aproach. I could not uset 1/2 wave antennas be3cause that
> violates the laws laid down by Maxwell in all his laws so I used full
> wave radiators to continue, after all it xcannot be a law if you have
> to make asumptions. I applied a time varying field to make it dynamic
> so that it conforms to Maxwell
> laws Thus in effect my aproach should be considerfed law
> Now we come back to existing aproaches of present day scientists and
> they have chosen to ignore the required conditions and in its place
> started to apply assumption which you are not allowed to do with laws
> only theories. Scientists and others further violated existing laws
> ala Maxwells laws which are based upon equiulibrium in all cases and
> used it where it is not applicable.
> Now all computor programs are based around Maxwells LAWS so how come
> it is used in violation of those same laws?
> I followed the boundary laws in my expansion of Gaussian law where the
> results conform to Maxwell and as I have described earlier the tank
> cuicuit is the result but without having to make assumptions
> assumptions because I abided by LAW. At the same time it clearly
> prooves that asuumptions made by scientists and programmers are
> clearly in error of itself. Since I like to do things from first
> principles it was my responserbilty to ask electrical people and those
> familiar with the state of the art that the principles I used were
> "not out of date" ie now revised. One response came from a ham with a
> Doctorate working for MIT. He clearly stated that mathematics support
> my approach and showed how they were in conformance with Maxwells
> LAWS. Nobody concurred with his finding and none supplied reasons why
> except that 'you can't do that'! So until somebody of stature
> challenges his confirmation I stand my ground. Now W7el is making a
> living from programs that are applying Maxwells LAWS to items within a
> boundary that are NOT in equilibrium which is INCORRECT. Others by the
> way deny the existance
> of boundary Laws ala equilibrium as if it does not mean anything.

> Ofcourse programmers say I only copied what the government released
> ala if it is printed in a book it must be correct so perhaps there is
> a computor programmer around as to why he continous to use erroneos
> methods for programming with respect to radiators!
> Best regards
> Art Unwin KB9MZ....XG
>

ok... now if you have a LAW that is different than what is put down in the existing maxwell's 4 equations you must be able to write the equations that make your law different than his. if you can't do that, its no better than a bag of hot air. so show your calculations, write a paper, get it published and show the rest of the world that uses those equations and gets perfectly valid results why we are all wrong.

1626. Re: Ringo ARX-2 vs ARX-2B - What's the deal?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 22:06:19 UTC
From: nm5k@wt.net
Message-ID: <1190585179.025074.154140@r29g2000hsg.googlegroups.com>
Source record: 36156

On Sep 23, 4:16 pm, Jim-NN7K <nn7kexk7...@noway.net.> wrote:
> Realistically, it
> probably makes little difference, overall, but was a sales pitch,
> started by AEA, on its Isopole antenna.

I saw a large difference when I tested mine. Using stable local
signals to test, I often saw 3-4 S units worth of difference on
the old IC-22u I was using at that time.
But the difference will vary to each installation, length of coax,
etc... It's even possible for the common mode currents to add
in phase and cause an increased gain, but that is very rare.
The decoupling kit makes the antenna work the same no
matter the length of coax, etc..
Well worth the trouble I think.
BTW, I've compared the decoupled cushcraft to the isopole.
The decoupled cushcraft was close, much closer than the
non decoupled version, but the isopole was still the best
by a slight margin. The isopole was probably the best dual
5/8 antenna ever made as far as decoupling the line.
But for the money and slimmer looks, the 2B cushcraft is
pretty good. I used one for a long time.
MK

1627. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 22:16:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fd6okfukb1@news.albasani.net>
Source record: 36157

Dave wrote:
> ...
> ok... now if you have a LAW that is different than what is put down in the
> existing maxwell's 4 equations you must be able to write the equations that
> make your law different than his. if you can't do that, its no better than
> a bag of hot air. so show your calculations, write a paper, get it
> published and show the rest of the world that uses those equations and gets
> perfectly valid results why we are all wrong.

Who are you to tell him to shut up? Don't you realize you only manage
to make yourself look the idiot?--Well of course not, that is quite obvious!

You think you will tell the rest of us how to conduct ourselves when you
are finished with him?

Just where in the hell do you come from? And, what the hell makes you
have any right whatsoever to do so?

Go away--PLONK!

JS

1628. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 23:10:58 UTC
From: Dave <noone@nowhere.com>
Message-ID: <6oCJi.4268$ax2.736@trndny08>
Source record: 36158

"John Smith" <assemblywizard@gmail.com> wrote in message
news:fd6okfukb1@news.albasani.net...
> Dave wrote:
> > ...
>> ok... now if you have a LAW that is different than what is put down in
>> the existing maxwell's 4 equations you must be able to write the
>> equations that make your law different than his. if you can't do that,
>> its no better than a bag of hot air. so show your calculations, write a
>> paper, get it published and show the rest of the world that uses those
>> equations and gets perfectly valid results why we are all wrong.
>
> Who are you to tell him to shut up? Don't you realize you only manage to
> make yourself look the idiot?--Well of course not, that is quite obvious!
>
> You think you will tell the rest of us how to conduct ourselves when you
> are finished with him?
>
> Just where in the hell do you come from? And, what the hell makes you
> have any right whatsoever to do so?
>
> Go away--PLONK!
>
> JS
>
go plonk yourself... i am simply challenging someone who has shown himself
to be full of hot air to properly explain his revolutionary law that has
evaded the rest of the world, and who has been handwaviing and telling
everyone that he has this great new law... but can never explain it in terms
that anyone understands... just more handwaving and generalizing. if you
can't take a challenge then you don't belong on usenet. and art sure
doesn't need you to defend him, he does well enough to make an ass of
himself.

1629. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-23 23:59:24 UTC
From: nm5k@wt.net
Message-ID: <1190591964.122767.191450@g4g2000hsf.googlegroups.com>
Source record: 36159

On Sep 23, 6:10 pm, "Dave" <no...@nowhere.com> wrote:
> "John Smith" <assemblywiz...@gmail.com> wrote in message
>
> news:fd6okfukb1@news.albasani.net...
>
> > Dave wrote:
> > > ...
> >> ok... now if you have a LAW that is different than what is put down in
> >> the existing maxwell's 4 equations you must be able to write the
> >> equations that make your law different than his. if you can't do that,
> >> its no better than a bag of hot air. so show your calculations, write a
> >> paper, get it published and show the rest of the world that uses those
> >> equations and gets perfectly valid results why we are all wrong.
>
> > Who are you to tell him to shut up? Don't you realize you only manage to
> > make yourself look the idiot?--Well of course not, that is quite obvious!
>
> > You think you will tell the rest of us how to conduct ourselves when you
> > are finished with him?
>
> > Just where in the hell do you come from? And, what the hell makes you
> > have any right whatsoever to do so?
>
> > Go away--PLONK!
>
> > JS
>
> go plonk yourself... i am simply challenging someone who has shown himself
> to be full of hot air to properly explain his revolutionary law that has
> evaded the rest of the world, and who has been handwaviing and telling
> everyone that he has this great new law... but can never explain it in terms
> that anyone understands... just more handwaving and generalizing. if you
> can't take a challenge then you don't belong on usenet. and art sure
> doesn't need you to defend him, he does well enough to make an ass of
> himself.

I'd ignore him. The moron can't even read properly...
I see no text written where you tell Art to shut up, or even write at
a lighter
shade of print for that matter..
I think "John Smith", or "Bret", or whoever the heck he really is,
would prefer
that Art brainwash all the unsuspecting readers into thinking what he
writes

is true fact without question. Who cares if it's total BS or not, it's new!
"John Smith" doesn't care if it's all BS or not, just as long as it's some
new theory that seems to contradict old established theory.
He has shown repeated disdain for proven established theory.
He thinks that being most that wrote it are either dead, or in an advanced
age state, that obviously it can't fit in with the "New World Order" of
code toads that dabble with antennas on occasion.
After all, most lived decades ago. What could they possibly know
compared to a code toad that is living in the early part of the 21st century?

I envision him as the type that probably believes most of what he hears on
Coast to Coast AM..

Did I mention that he's a prime time smartass?
Probably not needed, being you got a taste first hand.
Don't worry about looking like an idiot. Anyone with half a brain can see where that dubious honor really belongs..
It might have to be shared by two people though... :/
But at least Art is not really a smartass. I'll give him that.. He's just
confused... I have much less problem with that, than I do a smartass.
Art is confusing the minds of new or unsuspecting readers with all his "theory" though. Thats why he gets so much flak.
Some of his stuff makes the "EH" antenna guy actually look sane
by comparison.. And thats kinda scary... :/
MK

1630. Re: Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 00:12:18 UTC
From: Larry <invalid@invalid.com>
Message-ID: <46f700e0$0$15919$3406c2d1@news.ncia.net>
Source record: 36160

Bob Baldwin wrote:

> I just use 1/4 wave whips on mine - one for 2 meters and a longer one
> for FM broadcast, mounted on the T-top's antenna mounting plates. Just
> something to consider if you cannot find the longer marine antenna that
> you're looking for.
>
> 73,
> bob

Thanks, Bob,

I've thought about doing just that. A 1/4 wave on 2m is about 19" and would not require folding down. I was kinda hoping to find some gain which would also match the VHF Marine band antenna next to where it would be, but I can't find anything so far.

--

Larry W1HJF
rapp at lmr dot com

1631. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 00:21:29 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190593289.370698.250890@d55g2000hsg.googlegroups.com>
Source record: 36161

On 23 Sep, 14:31, "Dave" <no...@nowhere.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1190578947.703641.305560@50g2000hsm.googlegroups.com...
>
>
>
>
>
> > On 23 Sep, 10:54, "Dave" <no...@nowhere.com> wrote:
> >> back again art?? still stuck on 'equilibrium'??? 'equilibrium' is a
> >> nice
> >> catch word. and yes, many 'masters' heartily believed that everything
> >> had
> >> to be in 'equilibrium' with something or another. but we have come a
> >> long
> >> way since then. there can be no energy flow between things in
> >> equilibrium,
> >> and we all know there is energy flowing in antenna elements. if there
> >> wasn't they wouldn't radiate. and we can directly measure it with
> >> current
> >> and voltage probes. so while maybe the static case of coulomb's law may
> >> be
> >> said to represent 'equilibrium', none of the others needs that... in fact
> >> none of the others would exist if everything was in 'equilibrium'. the
> >> current, curl, and d/dt parts of the equations are all a representation
> >> of
> >> non-equilibrium conditions that must exist for those equations to be of
> >> any
> >> use. so get out of the 19th century and into the 21st and join the rest
> >> of
> >> us in the understanding of the dynamic world around us!
>
> >> "art" <aun...@insightbb.com> wrote in message
>
> >>news:1190568794.245105.44250@y42g2000hsy.googlegroups.com...
>
> >> > For full understanding of how Maxwells laws were generated one has to
> >> > check if eny proviso's were written in.
> >> > Ffor instance I suspect that there was a proviso for equilibrium in
> >> > every law thar Maxwell used for his summation ofr laws there was an
> >> > exceptance by all the masters that without equilibrium the who univere
> >> > would fall apart.
> >> > Some where along the line somebody deviated from this proviso and made

> >> > the assumption that at every point on a radiator can be seen as a sino
> >> > soidal current that causes radiation because the assumption was needed
> >> > to conform with Maxwells laws while ignoring the dictae of the masters
> >> > that the laws of the universe is bound by
> >> > by equilibrium so the assumption was conncocted to "solve" the 1/2
> >> > wave problem. Can anybody versed in the art point to one of the many
> >> > laws at his time were not based on equilibrium. In other words did any
> >> > of the work he used specifically addres things that were NOT in
> >> > equilibrium to justify its use for items not in equilibrium to
> >> > substantiate the use of Maxwells laws to derive its function. Being a
> >> > mechanical engineer I am not well informed
> >> > of all the doings of the masters
> >> > TIA
> >> > Art KB9MZ- Hide quoted text -
>
> >> - Show quoted text -
>
> > Well David my checks on books on the subject that revealed that all
> > Maxwells laws
> > conform to standard boundary conditions. When I started enlarging the
> > static law of statics I was cogniscent of the fact that the same
> > boundary conditions must exist to maintain plausability. This forced
> > me to make sure that the additions within the boundary must not alter
> > the boundary aproach. I could not uset 1/2 wave antennas be3cause that
> > violates the laws laid down by Maxwell in all his laws so I used full
> > wave radiators to continue, after all it xcannot be a law if you have
> > to make asumptions. I applied a time varying field to make it dynamic
> > so that it conforms to Maxwell
> > laws Thus in effect my aproach should be considerfed law
> > Now we come back to existing aproaches of present day scientists and
> > they have chosen to ignore the required conditions and in its place
> > started to apply assumption which you are not allowed to do with laws
> > only theories. Scientists and others further violated existing laws
> > ala Maxwells laws which are based upon equiulibrium in all cases and
> > used it where it is not applicable.
> > Now all computor programs are based around Maxwells LAWS so how come
> > it is used in violation of those same laws?
> > I followed the boundary laws in my expansion of Gaussian law where the
> > results conform to Maxwell and as I have described earlier the tank
> > cuicuit is the result but without having to make assumptions
> > assumptions because I abided by LAW. At the same time it clearly
> > prooves that asuumptions made by scientists and programmers are
> > clearly in error of itself. Since I like to do things from first
> > principles it was my responserbilty to ask electrical people and those
> > familiar with the state of the art that the principles I used were
> > "not out of date" ie now revised. One response came from a ham with a
> > Doctorate working for MIT. He clearly stated that mathematics support
> > my approach and showed how they were in conformance with Maxwells
> > LAWS. Nobody concurred with his finding and none supplied reasons why
> > except that 'you can't do that'! So until somebody of stature

> > challenges his confirmation I stand my ground. Now W7el is making a
> > living from programs that are applying Maxwells LAWS to items within a
> > boundary that are NOT in equilibrium which is INCORRECT. Others by the
> > way deny the existance
> > of boundary Laws ala equilibrium as if it does not mean anything.
> > Ofcourse programmers say I only copied what the government released
> > ala if it is printed in a book it must be correct so perhaps there is
> > a computor programmer around as to why he continous to use erroneos
> > methods for programming with respect to radiators!
> > Best regards
> > Art Unwin KB9MZ....XG
>
> ok... now if you have a LAW that is different than what is put down in the
> existing maxwell's 4 equations you must be able to write the equations that
> make your law different than his. if you can't do that, its no better than
> a bag of hot air. so show your calculations, write a paper, get it
> published and show the rest of the world that uses those equations and gets
> perfectly valid results why we are all wrong.- Hide quoted text -
>
> - Show quoted text -

Sooner or later you will have to act your age.
The tank circuit is a electrical circuit that is also the circuit
of a full wave radiator regardless of how the extended mathematics and
my work
portrays. It clearly shows that release of energy by shorting the
energy source
is how an efficient radiating system works i.e two energy sources
continuing a pendulum swing
as it were. Attack that if you wish since the books validate that
without reference to equilibrium or Gauss.
It stands on its own. If you end feed a folded full wave length dipole
you will get an answer that Maxwells laws will verify and was tried
out by a guy named Frank who I do not know using NEC 4 antenna
computing program and found to be correct. Nobody but nobody has
presented anything that point out errors in any of this.
Now I come to the second point. I would have thought that radiation of
a 1/2 wave dipole would concurr with that of
a full wave end fed radiator but it doesn't. Why is that? When I try
to feed it at the end voltage becomes a problem
as there is no energy receptical available which is illustrated by the
socalled end effects where the voltage has nowhere to go but into the
atmosphere directly with it being contained to a specific frequence
given by the radiators
length so certainly it does not connect with the tank circuit of a
full wave.
So now we can also take a look at the electrical circuit of a half
wave end fed radiator where we come up with a series circuit but no
evidence of what starts the radiation and in fact the circuit has none
of the character istics shown by the tank circuit and does not provide

any clues as to what creats radiation, this all experts agree upon.
Nobody but nobody has ever been able to describe radiation.
Now based on the parallel circuit I profer the following. Static particles are allowed to rest on diagmatic materials
and possibly paramagnetic materials each of which cannot retain a magnetic field. All other materials are bound with specific electrons that repulse static particles. From the same gaussian laws which when expanded the way I stated
is directly related to present dynamic laws such that on a full length radiator there are particles at rest and I might add decaying.It is reasonable to assume that the instant release of energy overcomes the inertia of the static particles and push them awayby fracturing the arbitary field. Those that do not escape return to the radiator surface
which is now fully occupied with static particles thus forcing the particle to burrow under the surface providing skin effect of decay.
The next release of energy does the same thing but fracture or penetrates the arbitary border at a different place producing radiation other than that of a planar array or any other array not in equilibrium.
As for the half wave there is nothing that suggests any similarity to the tank circuit, no suggestion that energy release is from two energy sources but evidence that there is not one to contain the voltage swings/.
Now the tank circuit shows that beyond the frequency band edges there is a strong dip in filter pass abilities so the radiation is retained within a certain spectrum. In a series circuit the spectrum does not have a pass filter
and infact the end effect is really the escape of energy to the atmosphere without a containment within the desired frequency spectrum so clearly it is not operating efficiently which also suggests that the driven energy is not fully matched to the impedance of the antenna itself which again suggests that because it not resonate in circuit terms the feed line is invaded to correct the situation.
So be my guest. End feed a half wave radiator and a endfed full wave radiator and then compare.
The new shortened antenna from the university of R.I. is a good place to start where those who are familiar with the state of the art state that the feed line has been forced to become a part of the antenna so one has to look at SYSTEM as a whole. Now using the same antenna the wire does not stop at the top but comes down to the starting point by winding in a contra wound direction such the radiator is a full wave length and in equilibrium and by strentch the height of the radiator to remove any stray capacitance that has been added (since the LC ratio of an antenna must be held to) you will find that the new radiator is balanced (in equilibrium), has no end effects and does not extend the circuit to the feed lines and has the same impedance and volume of the original short antenna but with more gain.
With all the above I rest my case especially since nobody has refuted any of it in scientific terms which includes mathematics.

Isn't life good when things come to a successful end such that the
time has come around again as it always does to throw the old books
away of past generations and go with books of the new generation?
Best regards to all
Art Unwin..KB9MZ..... ex UK

1632. Re: Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 00:28:23 UTC
From: jimlux@earthlink.net
Message-ID: <1190593703.987612.223690@k79g2000hse.googlegroups.com>
Source record: 36162

On Sep 23, 12:34 pm, oeg...@gmx.de wrote:
> Has anybody a solution to speedup the NEC-Engine, using multiple CPU-
> Cores?
> In standard use, only one NEC-Engine is running. The NEC-Engine does
> not use multi-threading technique and therefore only one CPU-Core is
> running.

The NEC engine calls standard matrix math routines, so one can replace
the libraries with a multicore library (or, even, with a MPI based
cluster library). This can help a lot on huge models (thousands of
segments)

>
> Todays computers have multiple cores. Even I am using one with two
> cores (Intel Dual-Core). And there are more cores available in the
> future (3,4 and more).
>
> My question is, is threre a solution for speeding up the antenna
> calculation using NEC2/4-Engine? If not, I plan to code a wrapper NEC-
> Engine, that is able to busy all CPU-Cores and merging the results to
> one output file. Especially antenna calculation can be easly divided
> into multiple parts (eg. radiation pattern division). If there is a
> solution, I do not want to reinvent the tire again.

Or when you're doing multiple frequencies.

The NEC engine does things in several chunks:
a) building the matrix from all the geometry, including the coupling
between segments -this is frequency dependent
b) solving the matrix for the segment currents - this is a
straightforward (but time consuming) linear equation solving process
c) calculating the field by integrating all the segment currents -
this is independent among the az/el's or near field points in the
output.

So there's opportunities for parallelism in each of the three chunks,
some of which are almost embarassingly parallel (EP).
a) if you're doing an analysis at multiple frequencies, running each
frequency on a separate machine/core is a great idea, since they're
essentially independent.
b) as you suggested, breaking up the output computation (c, above) is
a natural
c) using a multicore or cluster matrix math package can help with b,
above.

Whatever you do, you should seriously contemplate basing your work on the NEC4 engine, rather than the older NEC 2 engine. Sure, you'll have to pay for it, but it's structured better for what you want to do, and more accurate to boot.

1633. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 00:45:00 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190594700.300659.26440@o80g2000hse.googlegroups.com>
Source record: 36163

On 23 Sep, 16:10, "Dave" <no...@nowhere.com> wrote:
> "John Smith" <assemblywiz...@gmail.com> wrote in message
>
> news:fd6okfukb1@news.albasani.net...
>
>
>
> > Dave wrote:
> > > ...
> >> ok... now if you have a LAW that is different than what is put down in
> >> the existing maxwell's 4 equations you must be able to write the
> >> equations that make your law different than his. if you can't do that,
> >> its no better than a bag of hot air. so show your calculations, write a
> >> paper, get it published and show the rest of the world that uses those
> >> equations and gets perfectly valid results why we are all wrong.
>
> > Who are you to tell him to shut up? Don't you realize you only manage to
> > make yourself look the idiot?--Well of course not, that is quite obvious!
>
> > You think you will tell the rest of us how to conduct ourselves when you
> > are finished with him?
>
> > Just where in the hell do you come from? And, what the hell makes you
> > have any right whatsoever to do so?
>
> > Go away--PLONK!
>
> > JS
>
> go plonk yourself... i am simply challenging someone who has shown himself
> to be full of hot air to properly explain his revolutionary law that has
> evaded the rest of the world, and who has been handwaviing and telling
> everyone that he has this great new law... but can never explain it in terms
> that anyone understands... just more handwaving and generalizing. if you
> can't take a challenge then you don't belong on usenet. and art sure
> doesn't need you to defend him, he does well enough to make an ass of
> himself.- Hide quoted text -
>
> - Show quoted text -

Bull. A ham who holds a doctorate and works for MIT provided the
corroberating details.
It is not my fault that your mathematical knoweledge and education
could not keep up with him which is the same for all others on the

thread. Nobody but nobody could fault his mathematics and you call that just "hand waving"?
David it was you who led the charge and consistently stated that you can't apply a time varient to a static field and refused to acknowledge that the math supplied that concurred with Maxwells laws relying only on the fact that it came from your own mouth so it must be correct. Now that I call "handwaving" all mouth and no facts proffered to confirm your opinions or guesstimates. Now you say you should be able to take a "challenge" well I invite any scientifically based challenge some thing I have hoped for in a long while from the self professeed experts and am still waiting.
I can understand opinions from hobbiests you have joined the ranks of ham radio but for those skilled in the art and have gone thru the reqimen of getting a degree or obtaining the rights of a professional engineer one would expect a more factual debate on the subject. If you don't understand the subject then you default your right to critisize.
Now I have Richard firing his nonsense across my bow with the credentials of a degree in geography that trumps all others in the hope that he can get somebody to talk to him.
Have a happy day to all
Art Unwin KB9MZ......ex UK.

1634. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 00:48:05 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <h_OdnWo39tXrlGrbnZ2dnUVZ8sylnZ2d@bt.com>
Source record: 36164

<snip>
> Isn't life good when things come to a successful end such that the
> time has come around again as it always does to throw the old books
> away of past generations and go with books of the new generation?
> Best regards to all
> Art Unwin..KB9MZ..... ex UK
>

Art
Science is about building on the foundations of the past and not about throwing away books. The old methods of calculation still work fine, its just that in the light of new knowledge we can refine the methods to produce more accurate results. All of our achievements to date have been built on the foundations laid down by past generations and it is foolish and dangerous to dismiss or ignore any part of history. Never, ever throw away a book - well maybe the ones by Catherine Cookson et al :-)
Regards
Mike G0ULI

1635. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 00:48:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <0v1ef3pf95le39r45ungrtth2bfmgulilo@4ax.com>
Source record: 36165

On Sun, 23 Sep 2007 17:21:29 -0700, art <aunwin@insightbb.com> wrote:

>Isn't life good when things come to a successful end such that the
>time has come around again as it always does to throw the old books
>away of past generations and go with books of the new generation?

Are you quoting Gobbels now?

This "golden city on the hill" fluff hardly describes any antenna of
remarkable ability. The alternative is so much misty eyed and fond
desires (superstition) like a pre-teen girl's scribbling into her
diary.

73's
Richard Clark, KB7QHC

1636. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 00:59:02 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <en2ef3ps6l0jkdolb9230p1rh17oj2f6mg@4ax.com>
Source record: 36166

On Sun, 23 Sep 2007 17:45:00 -0700, art <aunwin@insightbb.com> wrote:

>Now I have Richard firing his nonsense across my bow with the
>credentials of a degree in geography that trumps all others in the
>hope that he can get somebody to talk to him.

Seems to have worked ;-)

Oh, by the way, it is a degree in English (you know, the country you
hate - now THATS geography).

By the by, I see you still lean on MIT who left here misquoting
Feynman and having mixed up his math (at least you both can have a
reunion when your next anniversary comes up).

Can I anticipate another sob story about how wicked we are here? (Boy,
those "gentlemen of eham" sure stomped your ego.)

73's
Richard Clark, KB7QHC

1637. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 01:06:23 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fd72ig$vd3$1@news.albasani.net>
Source record: 36167

nm5k@wt.net wrote:

> I'd ignore him. The moron can't even read properly...
> I see no text written where you tell Art to shut up, or even write at
> a lighter
> shade of print for that matter..
> I think "John Smith", or "Bret", or whoever the heck he really is,
> would prefer
> that Art brainwash all the unsuspecting readers into thinking what he
> writes
> is true fact without question. Who cares if it's total BS or not, it's
> new!
> "John Smith" doesn't care if it's all BS or not, just as long as it's
> some
> new theory that seems to contradict old established theory.
> He has shown repeated disdain for proven established theory.
> He thinks that being most that wrote it are either dead, or in an
> advanced
> age state, that obviously it can't fit in with the "New World Order"
> of
> code toads that dabble with antennas on occasion.
> After all, most lived decades ago. What could they possibly know
> compared to a code toad that is living in the early part of the 21st
> century?
>
> I envision him as the type that probably believes most of what he
> hears on
> Coast to Coast AM..
>
> Did I mention that he's a prime time smartass?
> Probably not needed, being you got a taste first hand.
> Don't worry about looking like an idiot. Anyone with half a brain can
> see where that dubious honor really belongs..
> It might have to be shared by two people though... :/
> But at least Art is not really a smartass. I'll give him that.. He's
> just
> confused... I have much less problem with that, than I do a smartass.
> Art is confusing the minds of new or unsuspecting readers with all
> his "theory" though. Thats why he gets so much flak.
> Some of his stuff makes the "EH" antenna guy actually look sane
> by comparison.. And thats kinda scary... :/
> MK
>

Idiots never cease to amaze me--and OMG, there is a NEVER ENDING SUPPLY!

PLONK

JS

1638. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 01:06:28 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <b5WdnUWgus9YkGrbRVnyigA@bt.com>
Source record: 36168

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in message
news:pan.2007.09.23.16.46.28.985780@from.qrz.com...
>
> I just read the following on one of the mailing lists I subscribe to:
>
> "Quarter wave ground mounted radials are a waste of wire and a hold over
> from the olden days. Check the antenna handbook, the new philosophy is
> more and shorter. The thing is that the bulk of the energy from the
> vertical antenna is near the base of the antenna and this is what you are
> trying to capture. A quarter wave radial sounds logical but the planet
> will detune it so a quarter wave means nothing to the current."
>
> What say you all?
>
Hi Rick

I have just tried an HF 80 metre ground mounted quarter wave vertical in exactly the conditions you describe. The screen of the coax feedline is grounded at the base of the antenna with a copper earth rod into very conductive ground (effectively wet sand). The antenna impedence and performance appeared identical whether or not quarter wave radials were attached or not.

At a previous location with less conductive soil the radials did make a difference.

A couple of quarter wave radials can certainly be effective and easier to run out than a multitude of shorter wires circling the antenna. As usual it all depends on the local conditions at your location and what you have available to work with.

Mike G0ULI

1639. Re: Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 01:18:33 UTC
From: Bob Baldwin <bob-baldwin@tamu.edu>
Message-ID: <HdEJi.305711$5y.289717@newsfe18.lga>
Source record: 36169

Larry wrote:
> Bob Baldwin wrote:
>
>> I just use 1/4 wave whips on mine - one for 2 meters and a longer one
>> for FM broadcast, mounted on the T-top's antenna mounting plates. Just
>> something to consider if you cannot find the longer marine antenna
>> that you're looking for.
>>
>> 73,
>> bob
>
> Thanks, Bob,
>
> I've thought about doing just that. A 1/4 wave on 2m is about 19" and
> would not require folding down. I was kinda hoping to find some gain
> which would also match the VHF Marine band antenna next to where it
> would be, but I can't find anything so far.
>
Larry,
Those marine antennas are really pretty, and I figured you wanted one
to compliment the existing one. I found at least one guy that uses his
VHF marine antenna on 2 meters, and says the match is better on 2 than
marine. Check
"http://cruisenews.net/cgi-bin/mmham/webbbs_config.pl/noframes/read/1372"
and maybe you can contact him for more info.
73,
bob wa5jot
Power Cat CC / Tops-N-Towers T-Top

1640. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 01:22:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fd73fr$vd3$2@news.albasani.net>
Source record: 36170

art wrote:

> ...
> Art Unwin..KB9MZ..... ex UK
>

Art:

Although I may, or may not, agree or share your exact visions, questions, assumptions, etc., only fools move to stop discussion, debate, experimentation and new ideas. I think it is quite apparent--for every one success a man will ask a thousand questions--try a thousand things. The easy stuff has all been done--the more difficult lays before us. Those before us never thought they left a completed work but only wished for others to follow behind them and further their thought, experiments and discovery.

Hang in their, almost every concept we now accept (until better presents itself) was scoffed at and belittled, men have been imprisoned, and worse for even challenging accepted principals and thinking ...

Hang in their, asking questions has never hurt. Just choose those more capable to interact with. Interacting with self-important morons never bears fruit ... and you know about news groups.

Regards,
JS

1641. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 02:41:24 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13fe8v27mr18g53@corp.supernews.com>
Source record: 36171

Dave wrote:
>
> Quck question, Roy,
>
> Would it matter if I "separated" the whips electrically with, say, 55 feet
> of coax? (That's approx the length I get for RG-174 coax, which is
> something like 1/8" in diameter, with a velocity vactor of .66 and working
> with 9 MHz.) Just a thought, but I don't know whether it has any merit or
> not. And I am thinking I could adjust that "length" with an RLC circuit
> through which I sort of "tune" it. What say you? Is this line of thought
> worth persuing? Or would wiggling he whips still throw everything off?
>
> And I do seem to have a fair abount of patience with this sort of thing.
> Been working on the current project for about 2 years, had it working on and
> off, taking it apart occasionally to implement some new retrofit or
> engineering change. I am on disability, and have nothing but time on my
> hands.
>
> Thanks for any feedback...

You can answer most of your questions by modeling it with EZNEC. The free demo program available from http://eznec.com is perfectly adequate for the job. After going through the "Test Drive" tutorial in the manual, I suggest that you take a look at the d_Cardioid.ez example file to see how you can model an array with an ideal feed system. What you should do is model your array in a similar manner, with two perfect current sources. With the sources equal in magnitude and 180 degrees out of phase, you'll get a bidirectional pattern, and it won't be sensitive to frequency or element spacing. But then see what happens when you change the phase and/or magnitude of one of the sources just slightly, to simulate what any real phasing network would do. What happens to the pattern? Look at the feedpoint impedances at various frequencies, and see if you can figure out how you'll make a network to deliver the correctly phased currents into those impedances. Another thing you can do is try phasing them for a unidirectional pattern by giving the sources a relative phase angle of 180 degrees minus the electrical spacing of the elements (which of course will be different at each frequency). You can get a nice looking pattern, but you'll find it extremely sensitive to frequency and element spacing.

EZNEC will give you the opportunity to turn some of that available time into an educational experience. I guarantee you'll learn a lot in the process. If you want to learn even more about phased arrays, see Chapter 8 of the _ARRL Antenna Book_. The phased array section was completely rewritten and updated for the latest (21st) edition.

Roy Lewallen, W7EL

1642. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 02:43:40 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190601820.590004.116070@o80g2000hse.googlegroups.com>
Source record: 36172

On 23 Sep, 18:22, John Smith <assemblywiz...@gmail.com> wrote:
> art wrote:
>
> > ...
>
> > Art Unwin..KB9MZ..... ex UK
>
> Art:
>
> Although I may, or may not, agree or share your exact visions,
> questions, assumptions, etc., only fools move to stop discussion,
> debate, experimentation and new ideas. I think it is quite
> apparent--for every one success a man will ask a thousand questions--try
> a thousand things. The easy stuff has all been done--the more difficult
> lays before us. Those before us never thought they left a completed
> work but only wished for others to follow behind them and further their
> thought, experiments and discovery.
>
> Hang in their, almost every concept we now accept (until better presents
> itself) was scoffed at and belittled, men have been imprisoned, and
> worse for even challenging accepted principals and thinking ...
>
> Hang in their, asking questions has never hurt. Just choose those more
> capable to interact with. Interacting with self-important morons never
> bears fruit ... and you know about news groups.
>
> Regards,
> JS

Fully understood. Odd thing is that 73 magazine used to make a good
living by printing details of various antenna
building and I admit I built a few of them.Ihave described the
modifications needed for the new university antenna and for some
reason see no reason to build it because it is a dud. I know you built
the university antenna to check it out for yourself but I don't know
of anybody who did the same thing to verify the claim. So it goes for
the simple modification I supplied which if I am wrong gives loads of
ammunition to every body to shoot me down once and for all with
factual details but they seam scared to search for the truth. In the
absence of knoweledge usually resort to insults and name calling and I
see you got such a burst today. Remember that time when a guy appeared
with his new NEC 4 program and wanted to model a simple arrray I
supplied? Nobody would help him in checking things out and it took a
personal E mail from somebody who did not want to be identified to

help him with the proper useage of the program. It proved the veracity of what I had supplied dispite the lachof assistance to prove me wrong.
As yet nobody with knoweledge of the state of the art has taken me on with respectto what I have discovered. I have had posts given where I believe the central theme was poetry, others who said they couldn't understand despite posts given by a Doctrate holder, ofcourse there are many like the blasting that you just got which should invite back the multi posters that decimated several newsgroups. What I am doing is sharing my work so all can enjoy but if hams are satisfied with lesser antennas because of the poor conditions so be it. But to try and stop thespreading of a particular advance to protect their so called resumes as being experts is really hard to fathom. I thought it would be a delight to all if somebody refuted the mathematics given but only silence reigned and then joined by name calling. Look at todays posting, how many were devoid of insults and name calling, I think that they finished up in the majority so what does that say antenna talk by hams?
I am beginning to wonder with the spectrum being in such demand if the FCC would be justified in selling the amateur frequencies since it is certainly not the same when the frequencies were given, a listen to repeaters or a review of newsgroups going ons must fraustrate them very much. After the upcomming sale of frequencies which is in demand by industry I can easily see pressure on ham frequencies which is costing not contributing to the coffers. The idea that we are a public necessity was down graded years ago by industries inovative ideas so hams have a hard time now justifying their position. In the past it was often said that it was amatures that advanced the cusp of the science well we sure are not doing that now!
O well let the discussion move away from mathematical analysis of antennas or new designs and get back to argueing and calling people names e.t.c. so all can participate including those who are true hobbyist that do not wish to concern themselves with the engineering background but who also want to participate in the augument side that most hams relish.
Have a happy day and goodnight
Art Unwin KB9MZ...ex UK

1643. Re: Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 02:47:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13fe9a8f1cgpq45@corp.supernews.com>
Source record: 36173

jimlux@earthlink.net wrote:
> . . .
> Whatever you do, you should seriously contemplate basing your work on
> the NEC4 engine, rather than the older NEC 2 engine. Sure, you'll
> have to pay for it, but it's structured better for what you want to
> do, and more accurate to boot.
>

I was recently told that the non-commercial NEC-4 license doesn't include source code. I haven't confirmed this, but it's something you should investigate before purchasing an NEC-4 license if you intend to modify the source code.

You'll also, of course, need a Fortran compiler capable of compiling a multi-threaded application.

Roy Lewallen, W7EL

1644. Re: Ringo ARX-2 vs ARX-2B - What's the deal?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 02:55:47 UTC
From: Nate Bargmann <n0nb.DO.NOT.SPAM@ME.networksplus.net>
Message-ID: <pan.2007.09.24.02.55.44@ME.networksplus.net>
Source record: 36174

On Sun, 23 Sep 2007 15:06:19 -0700, nm5k wrote:

> BTW, I've compared the decoupled cushcraft to the isopole. The decoupled
> cushcraft was close, much closer than the non decoupled version, but the
> isopole was still the best by a slight margin. The isopole was probably
> the best dual 5/8 antenna ever made as far as decoupling the line. But
> for the money and slimmer looks, the 2B cushcraft is pretty good. I used
> one for a long time. MK

Speaking of Isopoles, apparently the outfit that bought the Isopole segment of AEA has never brought them to market. Fair enough. However, there is an outfit called Spectral (from Brazil, I believe) that is selling an "Isopole" that looks all the world in their ads the same as an AEA model. Their pricing is rather steep compared to when AEA was still a going concern. Has anyone tried one?

Fortunately, I still have most of a new 2m Isopole in a box that I picked up at a hamfest a few years back.

73, de Nate >>

--

"The optimist proclaims that we live in the best of all possible worlds,
the pessimist fears this is true."

1645. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 03:53:31 UTC
From: Dave <db5151@hotmail.com>
Message-ID: <13fed6p8h0jng0c@corp.supernews.com>
Source record: 36175

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:13fe8v27mr18g53@corp.supernews.com...
> Dave wrote:
>>
>> Quck question, Roy,
>>
>> Would it matter if I "separated" the whips electrically with, say, 55
>> feet of coax? (That's approx the length I get for RG-174 coax, which is
>> something like 1/8" in diameter, with a velocity vactor of .66 and
>> working with 9 MHz.) Just a thought, but I don't know whether it has any
>> merit or not. And I am thinking I could adjust that "length" with an RLC
>> circuit through which I sort of "tune" it. What say you? Is this line
>> of thought worth persuing? Or would wiggling he whips still throw
>> everything off?
>>
>> And I do seem to have a fair abount of patience with this sort of thing.
>> Been working on the current project for about 2 years, had it working on
>> and off, taking it apart occasionally to implement some new retrofit or
>> engineering change. I am on disability, and have nothing but time on my
>> hands.
>>
>> Thanks for any feedback...
>
> You can answer most of your questions by modeling it with EZNEC. The free
> demo program available from http://eznec.com is perfectly adequate for the
> job. After going through the "Test Drive" tutorial in the manual, I
> suggest that you take a look at the d_Cardioid.ez example file to see how
> you can model an array with an ideal feed system. What you should do is
> model your array in a similar manner, with two perfect current sources.
> With the sources equal in magnitude and 180 degrees out of phase, you'll
> get a bidirectional pattern, and it won't be sensitive to frequency or
> element spacing. But then see what happens when you change the phase
> and/or magnitude of one of the sources just slightly, to simulate what any
> real phasing network would do. What happens to the pattern? Look at the
> feedpoint impedances at various frequencies, and see if you can figure out
> how you'll make a network to deliver the correctly phased currents into
> those impedances. Another thing you can do is try phasing them for a
> unidirectional pattern by giving the sources a relative phase angle of 180
> degrees minus the electrical spacing of the elements (which of course will
> be different at each frequency). You can get a nice looking pattern, but
> you'll find it extremely sensitive to frequency and element spacing.
>
> EZNEC will give you the opportunity to turn some of that available time
> into an educational experience. I guarantee you'll learn a lot in the

> process. If you want to learn even more about phased arrays, see Chapter 8
> of the _ARRL Antenna Book_. The phased array section was completely
> rewritten and updated for the latest (21st) edition.
>
> Roy Lewallen, W7EL

Thank you, Roy. Seriously. I've been putting off trying EZNEC out, but guess it's been long enough. Like you say, time to put some of my spare time into a serious learning experience. Thank you for that link, too. Now I have no excuses. :)

I do appreciate your feedback, and encouragement. Sorry if I was being lazy. I really don't know why I've been putting it off, but I realize now that I have.

'preciate it.

Dave

PS: Thanks too for the tip on the latest edition of the ARRL Antenna Handbook. Now I know I need to get that edition, and not an older one.

1646. Re: Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 04:27:45 UTC
From: Frank <ve6cb@spamfree.telus.net>
Message-ID: <51HJi.74186$Pd4.37603@edtnps82>
Source record: 36176

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:13fe9a8f1cgpq45@corp.supernews.com...
> jimlux@earthlink.net wrote:
>> . . .
>> Whatever you do, you should seriously contemplate basing your work on
>> the NEC4 engine, rather than the older NEC 2 engine. Sure, you'll
>> have to pay for it, but it's structured better for what you want to
>> do, and more accurate to boot.
>>
>
> I was recently told that the non-commercial NEC-4 license doesn't include
> source code. I haven't confirmed this, but it's something you should
> investigate before purchasing an NEC-4 license if you intend to modify the
> source code.
>
> You'll also, of course, need a Fortran compiler capable of compiling a
> multi-threaded application.
>
> Roy Lewallen, W7EL

I have a non-commercial license, and it came with NEC 4.1 FORTRAN
source code.

Frank

1647. Re: Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 05:05:38 UTC
From: jimlux@earthlink.net
Message-ID: <1190610338.147387.289870@n39g2000hsh.googlegroups.com>
Source record: 36177

On Sep 23, 7:47 pm, Roy Lewallen <w...@eznec.com> wrote:
> jim...@earthlink.net wrote:

>
> I was recently told that the non-commercial NEC-4 license doesn't
> include source code. I haven't confirmed this, but it's something you
> should investigate before purchasing an NEC-4 license if you intend to
> modify the source code.

My non-commercial copy included Source. I can't imagine that getting
only precompiled versions would be particularly useful, unless they're
willing to make a whole raft of versions (more than you get with the
release I got) with various values for the maximum segments, etc.

OTOH, LLL did just change management, so they assigned all the
licenses from UC to the new LLL management consortium, and maybe they
changed how it works for new licenses. The website still says to make
your check payable to Regents of UC

http://www.llnl.gov/ipac/technology/software/softwaretitles/nec.php

And someday, Gerry Burke is going to retire, and whoever picks it up
from him may not be as willing and helpful to, for instance, recompile
peculiar versions for you.

>
> You'll also, of course, need a Fortran compiler capable of compiling a
> multi-threaded application.
>
That would be if you're doing finegrained parallelism (e.g. using a
multiprocessor BLAS library. Several of the strategies (dividing it
up by frequency) could actually be done by a reasonably simple shell
script/batch file that fires off the executable on different
processors with different input files. For my own NEC on a Cluster
runs, I've done the separate runs on separate machines and merge the
output files in post processing strategy.

> Roy Lewallen, W7EL

1648. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 05:14:39 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fd7h40stf1@news.albasani.net>
Source record: 36178

art wrote:

> ...
> Have a happy day and goodnight
> Art Unwin KB9MZ...ex UK
>

Art:

Let me cut though this BS--straight to the chase; this group would be better renamed to rec.radio.amateur.EZNEC

If eznec doesn't OK it--it just won't work; All which exists here are eznec-appliance users.

However, to some who have already built antennas which work, contrary to eznecs claim they won't, it is quite obvious current beliefs, equations, charts, theories, etc. are in some degree of error ...

Regards,
JS

1649. Re: Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 05:19:45 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fd7hdistf2@news.albasani.net>
Source record: 36179

oeguet@gmx.de wrote:
> Has anybody a solution to speedup the NEC-Engine, using multiple CPU-
> Cores?
> In standard use, only one NEC-Engine is running. The NEC-Engine does
> not use multi-threading technique and therefore only one CPU-Core is
> running.
>
> Todays computers have multiple cores. Even I am using one with two
> cores (Intel Dual-Core). And there are more cores available in the
> future (3,4 and more).
>
> My question is, is threre a solution for speeding up the antenna
> calculation using NEC2/4-Engine? If not, I plan to code a wrapper NEC-
> Engine, that is able to busy all CPU-Cores and merging the results to
> one output file. Especially antenna calculation can be easly divided
> into multiple parts (eg. radiation pattern division). If there is a
> solution, I do not want to reinvent the tire again.
>
> Regards,
> Aziz
>

The nec engine would need to be multi-core aware. As some have already
pointed out, you would need the source and the ability to modify it ...

At the present time, I'd be surprised if a 64 bit version of the engine
even existed; however, I have not even looked into that.

Regards,
JS

1650. Re: Beverage Antenna, Noise pickup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 07:29:54 UTC
From: nm5k@wt.net
Message-ID: <1190618994.982698.249760@w3g2000hsg.googlegroups.com>
Source record: 36180

On Sep 23, 11:41 am, rickn...@hotmail.com (Rick) wrote:
> I was reading in ON4UNs book, a section about Beverage antennas and decided to
> do some checking on mine, which is celebrating its ten year anniversary this
> month.

I've been thinking about putting one or two of those up this winter.
I do a lot of BC band listening along with 160m, so should be
interesting. Trying to decide what directions I want to go though..
I think Europe is probably one direction I'll go for sure, but can't
decide about the west.. I'm kind of leaning placing one basically
towards Asia, but haven't really decided yet..
I've never used them before, so it will be something new to
play with.
I'm also kicking around the idea of a new small loop to use up
there that will be quite large. I want it rotatable just like the
ones I use here at home. Will use heavy PVC I imagine.
My largest small loop here so far is a diamond 44 inches a side.
It's indoors next to me on a rotating stand. Stands almost
8 ft tall on the stand, and almost touches the ceiling.
Uses 5 turns.. Tunes 500kc-2300kc using various variable cap
configs.. Longwave if I tack on extra fixed caps.
I'm thinking about an even bigger one to use outdoors. :)
Maybe double the size of the present one, or even bigger.
I will use it for BC band more than anything, but will probably
rig it to cover 160m at the top of it's range if possible.
I like the loops when daytime BC listening. Very deep nulls.
Some mention using a shielded loop to aid balance, but
I've never needed to here. My conventional solenoid loops
can make a fairly strong unwanted station or noise totally
vanish in most cases in the daytime, when most is received
via ground wave. I want to try the beverages to see if I can
do a bit better at night when the skywave kicks in.
Also maybe be able to hear a bit of weak DX on 160m for
a change.
MK

1651. Re: Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 09:42:59 UTC
From: oeguet@gmx.de
Message-ID: <1190626979.112395.147820@d55g2000hsg.googlegroups.com>
Source record: 36181

It seems to be difficult to realize my wish! Nevertheless I will start with an simple antenna optimizer using multiple cpu cores without modifiying the nec-engines (e.g. NEC2 executables). Antenna optimization can be easily parallelized. Every sort of antenna parameters (experiment) could run on different processes and therefore can take advantage of multiple cpu cores.
I will see, how far I can go.
Aziz

1652. Re: Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 11:06:23 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <faiks4-osc.ln1@p400bob.personal.cox.net>
Source record: 36183

Hi Larry

Cant help you with a specific choice. Be aware though that considering the boat thumps around in the water the antenna will never be always quite vertical. If you run a "gain" device you may find you'll get a more choppy signal and max radiation lobe that never quite line up with the optimum. As an indicator a 5/8 (car mobile) whip in rolling country can actually work worse than a 1/4 wave. (And also in a city/skyscraper area, but for a different reason)

FWIW I do remember a 5/8 over 1/4 wave design some years ago where you could remove the phasing section and above. A handy feature.

Of course if the boat motor is broken and there is no swell it may be good to have gain!

Cheers Bob VK2YQA

Larry wrote:

> I've thought about doing just that. A 1/4 wave on 2m is about 19" and
> would not require folding down. I was kinda hoping to find some gain
> which would also match the VHF Marine band antenna next to where it
> would be, but I can't find anything so far.
>

1653. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 11:15:27 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fd868g$3jn$1@aioe.org>
Source record: 36182

"art" <aun*@insightbb.com> wrote in message
> The tank circuit is a electrical circuit that is also the circuit
> of a full wave radiator regardless of how the extended mathematics
> and my work portrays. It clearly shows that release of energy by
> shorting the energy source is how an efficient radiating system
> works i.e two energy sources continuing a pendulum swing
> as it were. Attack that if you wish since the books validate that
> without reference to equilibrium or Gauss.
Much clippage, then
> With all the above I rest my case especially since nobody has
>refuted any of it in scientific terms which includes mathematics.

And, Art, you haven't posted the mathematics to prove or even illustrate what you believe about this -- which would be valuable to you, as your beliefs are so different from antenna engineering practice and field experience.

You will have more credibility and respect if you post your mathematical proof so that others can investigate your beliefs using scientific methods, rather than persisting in your challenges for others to prove you wrong based only on your prose.

RF

1654. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 12:30:42 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190637042.938968.70990@o80g2000hse.googlegroups.com>
Source record: 36184

On 24 Sep, 04:15, "Richard Fry" <r...@adams.net> wrote:
> "art" <a...@insightbb.com> wrote in message
> > The tank circuit is a electrical circuit that is also the circuit
> > of a full wave radiator regardless of how the extended mathematics
> > and my work portrays. It clearly shows that release of energy by
> > shorting the energy source is how an efficient radiating system
> > works i.e two energy sources continuing a pendulum swing
> > as it were. Attack that if you wish since the books validate that
> > without reference to equilibrium or Gauss.
> Much clippage, then
> > With all the above I rest my case especially since nobody has
> >refuted any of it in scientific terms which includes mathematics.
>
> --------
>
> And, Art, you haven't posted the mathematics to prove or even illustrate
> what you believe about this -- which would be valuable to you, as your
> beliefs are so different from antenna engineering practice and field
> experience.
>
> You will have more credibility and respect if you post your mathematical
> proof so that others can investigate your beliefs using scientific methods,
> rather than persisting in your challenges for others to prove you wrong
> based only on your prose.
>
> RF

Already done all that on this newsgroup. Sweep for Gauss or gaussian
and it will get you up to date
Regards
Art

1655. Re: Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 12:52:47 UTC
From: Larry <invalid@invalid.com>
Message-ID: <46f7b31c$0$15938$3406c2d1@news.ncia.net>
Source record: 36185

Bob Bob wrote:
> Hi Larry
>
> Cant help you with a specific choice. Be aware though that considering
> the boat thumps around in the water the antenna will never be always
> quite vertical. If you run a "gain" device you may find you'll get a
> more choppy signal and max radiation lobe that never quite line up with
> the optimum. As an indicator a 5/8 (car mobile) whip in rolling country
> can actually work worse than a 1/4 wave. (And also in a city/skyscraper
> area, but for a different reason)
>
> FWIW I do remember a 5/8 over 1/4 wave design some years ago where you
> could remove the phasing section and above. A handy feature.
>
> Of course if the boat motor is broken and there is no swell it may be
> good to have gain!
>
> Cheers Bob VK2YQA
>
> Larry wrote:
>
>> I've thought about doing just that. A 1/4 wave on 2m is about 19" and
>> would not require folding down. I was kinda hoping to find some gain
>> which would also match the VHF Marine band antenna next to where it
>> would be, but I can't find anything so far.
>>

Actually, I remembered in the shower this morning that a 1/4 wave must have a ground plane to work against and the hardtop on which it would be installed is all fiberglass - no metal. Whoops! I guess I have to have some kind of antenna which does not require a ground plane - maybe a 1/2 wave or something similar. Now we're talking enough height that it has to fold down.

I'll follow the link that Bob gave and see what the guy is using. I suppose I could disconnect the marine VHF antenna and hook it up to the ICOM and a SWR meter and see what I get. I guess I should give that a try. I don't need to do anything to try that.

I know that I'd lose some of whatever gain those things claim, as the antenna would seldom be completely vertical, but I've never found that to be all that significant anyway. I just need to have an antenna which does not rely on a ground plane. Since I'm only fishing on lakes, I don't think that is all that significant anyway. I've found that marine VHF gets almost nowhere (nobody around) so I think I'd do better with 2

meters.
--

Larry W1HJF
rapp at lmr dot com

1656. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 12:56:20 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46f7b3eb$0$9564$4c368faf@roadrunner.com>
Source record: 36186

"art" <aunwin@insightbb.com> wrote in message
news:1190580200.010164.125760@r29g2000hsg.googlegroups.com...
> On 23 Sep, 12:02, "Dave" <no...@nowhere.com> wrote:
>> "Jimmie D" <GFEN...@carolina.rr.com> wrote in message
>>
>> news:46f6b42f$0$32484$4c368faf@roadrunner.com...
>>
>>
>>
>>
>>
>> > "Walter Maxwell" <w...@w2du.com> wrote in message
>> >news:0vmbf3lvc56a9t9ug1kr89knp88ai3b218@4ax.com...
>> >> On Sat, 22 Sep 2007 19:19:18 -0700, n...@wt.net wrote:
>>
>> >>>On Sep 22, 5:40 pm, art <aun...@insightbb.com> wrote:
>>
>> >>>> O.K. I may have muddied things. I hold to the fact that a one
>> >>>> wavelength dipole will always radiate at a higher efficiency than a
>> >>>> 1/2 wave dipole.
>>
>> >>>If it does, I doubt it's enough to measure on the air..
>>
>> >>>>The example I gave as for an instance was a quad
>> >>>> versus a 1/2 wave dipole.
>> >>>> This is readily seen by any operator empirically.
>>
>> >>>I've never seen it here. For that reason, I hardly use loops.
>> >>>Neither vertically oriented, or horizontal as for NVIS use.
>> >>>I don't see them as worth the extra trouble. Being I tested
>> >>>them on 75m using NVIS paths, a noticable difference in
>> >>>efficiency should have been readily apparent. It wasn't.
>> >>>In fact, I usually has slightly better performance using the
>> >>>dipoles, which I think was due to the bulk of the max current
>> >>>portions of the antenna being higher above ground in general.
>> >>>The loop sagged a bit in areas, and wasn't all that high above
>> >>>ground. The more wire near the ground, the more ground loss
>> >>>in general.
>>
>> >>>>Mathematically it is
>> >>>> proven that way also even tho both are in accordance to Maxwell's
>> >>>> laws.
>>
>> >>>Where is the math? You should find a very slight difference

>> >>>at best..
>> >>>It's common knowledge that even a short piece of wire 1/10
>> >>>of a wave long will radiate nearly all the power that is applied
>> >>>to it.
>> >>>You can go lots shorter than that if you want.
>> >>>If even a short piece of wire will radiate nearly all the power
>> >>>applied to it, what is the point on harping about some magical
>> >>>properties of a full wave length of wire?
>> >>>Art, you are starting to bark at the moon I'm afraid...
>>
>> >>>I was going to comment on some of your other posts, but I
>> >>>think I'll spare you the increase in blood pressure.
>> >>>All I can say is that you are starting to wander off in
>> >>>mumbo jumbo land again..
>> >>>Replacing known science with conjured mumbo jumbo is no
>> >>>way to live.
>> >>>MK
>>
>> >> Art, it distresses me to read the misleading statements you profess to
>> >> be
>> >> true in your posts.
>>
>> >> There is no difference in the 'efficiencies' between a full-wave and a
>> >> half-wave dipole. Let's assume the wire
>> >> size and conductivity of each dipole is such that we can say they both
>> >> radiate 98 percent of the power
>> >> delivered to them. Let's also say that the same amount of power is
>> >> delivered to both dipoles. What now is the
>> >> difference in the radiation between the two dipoles?
>>
>> >> The only difference is in the SHAPE of the radiation patterns--the
>> >> full-wave dipole will have a somewhat
>> >> narrower lobe in the direction broadside to the dipole than that of
>> >> the
>> >> half-wave dipole, therefore deriving
>> >> slightly more gain IN THAT DIRECTION than that of the half-wave, but
>> >> with
>> >> less gain than the half-wave in all
>> >> other directions. Consequently, the total integrated power in either
>> >> radiation pattern will be exactly the
>> >> same!!!
>>
>> >> If you want to express the mathematics of the conditions I described
>> >> here
>> >> according to J.C.Maxwell's
>> >> equations, you will find that Maxwell's equations fit the conditions
>> >> EXACTLY.
>>
>> >> Walt, W2DU
>>

>> > If any difference at all exist it is that the full wave antenna would
>> > be
>> > ever so slightly less efficient due to the ohmic losses of the extra
>> > wire.
>>
>> > Jimmie
>>
>> don't claim that until you have modeled it in full. it "may"
>
>
>
> What does "may" infere? Is it it 'may' or 'may not' or 'I am not sure'
> or 'I don't know'?
> I am not willing to procede with what you say unless you can be more
> difinitive.
> What does a house built on sand do?
>
>
> snip
> ragards
> Art KB9MZ....XG
>
Who said "may", not me

Jimmie

1657. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 13:03:52 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <YAOJi.35472$RX.25890@newssvr11.news.prodigy.net>
Source record: 36187

John Smith wrote:
> However, to some who have already built antennas which work, contrary to
> eznecs claim they won't, it is quite obvious current beliefs, equations,
> charts, theories, etc. are in some degree of error ...

I personally have never had a QSO using a simulated
antenna. :-)

It also works the other way. By accidentally violating
the modeling guidelines, I came up with a simulated
omnidirectional antenna with 24 dBi gain. Want to build
that one?
--
73, Cecil http://www.w5dxp.com

1658. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 13:09:59 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <HGOJi.35473$RX.20953@newssvr11.news.prodigy.net>
Source record: 36188

Jimmie D wrote:

>> On 23 Sep, 12:02, "Dave" <no...@nowhere.com> wrote:
>>> don't claim that until you have modeled it in full. it "may"

> Who said "may", not me Jimmie

The attributions indicate that Dave said "may".
--
73, Cecil http://www.w5dxp.com

1659. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 14:56:15 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190645775.679858.135840@o80g2000hse.googlegroups.com>
Source record: 36189

On 24 Sep, 06:03, Cecil Moore <nos...@w5dxp.com> wrote:
> John Smith wrote:
> > However, to some who have already built antennas which work, contrary to
> > eznecs claim they won't, it is quite obvious current beliefs, equations,
> > charts, theories, etc. are in some degree of error ...
>
> I personally have never had a QSO using a simulated
> antenna. :-)
>
> It also works the other way. By accidentally violating
> the modeling guidelines, I came up with a simulated
> omnidirectional antenna with 24 dBi gain. Want to build
> that one?
> --
> 73, Cecil http://www.w5dxp.com

I have gonedown that road also in the past. As one programmer stated
Antenna programs are not perfect and neither are you. They do not
adhere to Maxwells laws
because some have taken the libity to insert assumptions when things
don't work out.
Mathematicians usually find a constant to insert if they are not sure
of mathematical difference
or their mods don't work. You can do that with a theory because it has
not been confirmed but an electrical LAW
stands alone as being correct as it stands. Just imagine using Ohms
law with a fudge factor inserted where you have to insert a fuse to
take care of it! Even when dealing with superconductors there are
numurous provisos with respect to an ifnittessimle length that are
"solved with mathematical technics. With my amateur thesis that is on
unwin@sdsc.edu plus other letters and attillas I wrote down the tears
that the head of the nuclear industry in Russia stated with the
reliance on the computors ability to do multiple equations every
minuite of the dayin the hope that one answer fits the bill or at
least it will if you add constants where it deviates from what you
want!
However the assumptions used in this case finally worked out for 100
years and where it doesn't work
in the present computor era then you didn't follow the restrictions
that come with adding assumptions

1660. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 15:08:48 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fd8ju0tbj1@news.albasani.net>
Source record: 36090

Cecil Moore wrote:

> ...
> I personally have never had a QSO using a simulated
> antenna. :-)
>
> It also works the other way. By accidentally violating
> the modeling guidelines, I came up with a simulated
> omnidirectional antenna with 24 dBi gain. Want to build
> that one?

Cecil:

My statement was a little bold; I take it back. Not all here are stuck in the same rut. It is just sometimes I feel I am in a room full of children, you have to shout now and then just to get some order to the dominant personalities.

You realize, I am sure, my bark is much worse than the bite ...

Sorry. :-(

Regards,
JS

1661. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 15:27:54 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190647674.198983.228480@57g2000hsv.googlegroups.com>
Source record: 36091

On 24 Sep, 08:08, John Smith <assemblywiz...@gmail.com> wrote:
> Cecil Moore wrote:
>
> > ...
>
> > I personally have never had a QSO using a simulated
> > antenna. :-)
>
> > It also works the other way. By accidentally violating
> > the modeling guidelines, I came up with a simulated
> > omnidirectional antenna with 24 dBi gain. Want to build
> > that one?
>
> Cecil:
>
> My statement was a little bold; I take it back. Not all here are stuck
> in the same rut. It is just sometimes I feel I am in a room full of
> children, you have to shout now and then just to get some order to the
> dominant personalities.
>
> You realize, I am sure, my bark is much worse than the bite ...
>
> Sorry. :-(
>
> Regards,
> JS

John you are preaching to the converted! Cecil is known for standing
his ground
on technical matters despite the howls and catcalling. His posts
easily exceed a hundred or so
because he rarely get a reasonable technical response in this group.
That ofcourse takes a lot of tenaccity and visits to the texas
university library and I could never do that because the group would
attack the library contents. I prefer to hammer on the same subject a
bit over time for several years as you can see in the archives on
Gaussian antenna, this seasons you to laughing at the comments instead
of taking it personal because it becomes obvious what the technical
level is of the poster. No problem hobbiest having thought and
theories and stories of magnificent performance of a wire that rests
in a gutter and then drops to the ground so that they are part of ham
radio that produces statement that "my antenna is best because every
thing I hear I can work" Or "every thing is known about antennas"! or"
we already have good antennas so why do we need to know how they

work". But when they take on a technical mantle without the require
engineering regimen it can be very very funny.
Regards
Art

1662. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 15:37:04 UTC
From: Tom Corker <tomcorker@bluebottle.com>
Message-ID: <1190648224.752255.254140@d55g2000hsg.googlegroups.com>
Source record: 36092

OK, I've built my J-pole and it's looking quite good. In the end, I
went for 22mm copper tubing as I had some spare. I've still not
decided on the coax though. I've measured the run, and I'll be needing
12 meters (39 feet). In addition to the RG213, I've managed to find a
source of 'low-loss mini 8' (RG-8X). The RG213 is £1.40 per meter, and
the RG-8x is £0.65
per meter. Is the RG213 worth the difference on VHF?

Thanks for all your advice and help.

1663. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 15:49:12 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fd8m9ovbb2@news.albasani.net>
Source record: 36093

art wrote:

> ...
> work". But when they take on a technical mantle without the require
> engineering regimen it can be very very funny.
> Regards
> Art

Art:

Far too many times, I have been present during discussions where a "newbie" (one not well schooled in the amateur-antenna-religious-order) discusses some weird idea(s) he proposes to set in aluminum/copper and insulation. And, far too often I have seen him discouraged and "converted."

What the heck, let 'em try it, someone just may hit the lotto!--but then, I have seen the "hidden errors" in current knowledge.

Frankly, I love the fact data/knowledge exists which has been so explored as to let us, immediately, construct "canned antennas" with excellent performance characteristics (or at least functional/usable characteristics.)

Is it so difficult to allow some to explore less conventional designs, methods, ideas, experiments? From what I have seen, most who explore these "dark arts" have already explored commonly constructed antennas and yearn for some diversion (or, perhaps wish something for a special purpose--for example stealth!)

For those who walk to the beat of a different drummer--I'll keep the light on for 'ya, 'ya all hear? Just have the fortitude to take the slings and arrows ...

Regards,
JS

1664. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 15:54:34 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fd8mjs$i2h$1@aioe.org>
Source record: 36094

"art" <aunwin@insightbb.com> wrote in message
news:1190637042.938968.70990@o80g2000hse.googlegroups.com...
> On 24 Sep, 04:15, "Richard Fry" <r...@adams.net> wrote:
>> You will have more credibility and respect if you post your mathematical
>> proof so that others can investigate your beliefs using scientific
>> methods,
>> rather than persisting in your challenges for others to prove you wrong
>> based only on your prose.
>>
>> RF
>
> Already done all that on this newsgroup. Sweep for Gauss or gaussian
> and it will get you up to date.

All I find from you there is more paragraphs of your beliefs -- nothing
in the way of mathematical proof.

RF

1665. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 16:08:46 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fd8nee$3qn$1@news.albasani.net>
Source record: 36095

Richard Fry wrote:

> __________
>
> All I find from you there is more paragraphs of your beliefs -- nothing
> in the way of mathematical proof.
>
> RF

"If the facts don't fit the theory, change the facts." --Albert Einstein

From here:

http://www.humboldt1.com/~gralsto/einstein/quotes.html

You act as if math is the oracle which tells no lies--has no false
visions ...

Uncounted times, math is reshuffled to come into line with present
knowledge--the reverse has NEVER happened--at least not to my knowledge.

Regards,
JS

1666. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 16:14:13 UTC
From: Frank's <frank599@nojunkmailplease.telus.net>
Message-ID: <pnRJi.96225$bO6.48170@edtnps89>
Source record: 36096

>> And, Art, you haven't posted the mathematics to prove or even illustrate
>> what you believe about this -- which would be valuable to you, as your
>> beliefs are so different from antenna engineering practice and field
>> experience.
>>
>> You will have more credibility and respect if you post your mathematical
>> proof so that others can investigate your beliefs using scientific
>> methods,
>> rather than persisting in your challenges for others to prove you wrong
>> based only on your prose.
>>
>> RF
>
> Already done all that on this newsgroup. Sweep for Gauss or gaussian
> and it will get you up to date
> Regards
> Art

Can you provide the exact link? The first 20 pages of Google cannot
find the reference.

Regards,

Frank

1667. I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 16:15:35 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fd8nr7$3qn$2@news.albasani.net>
Source record: 36097

Perhaps?

"As far as the laws of mathematics refer to reality, they are not certain; as far as they are certain, they do not refer to reality."--Albert Einstein

And, I humbly propose:

"Too often, the ignorant are quick to conceal their ignorance in complexity not well grasped by common men."--John Smith

Regards,
JS

1668. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 17:04:56 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fd8qnv$15gk$1@f04n12.cac.psu.edu>
Source record: 36098

John Smith wrote:
> Richard Fry wrote:
>
>> _____________
>>
>> All I find from you there is more paragraphs of your beliefs -- nothing
>> in the way of mathematical proof.
>>
>> RF
>
>
> "If the facts don't fit the theory, change the facts." --Albert Einstein

So whose facts do I use to build my antenna?

Do I use facts that I have already used to build operable antennas that function as claimed, or do I use facts that to my knowledge have not ever been used build an antenna, but facts that only make for almost impossible to read text in a Usenet group?

It doesn't define one as close minded to note that extraordinary claims require proof at the same level.

wouldn't simple proof be a lot easier than declaring all who disagree as enemies of one sort or another?

Build one of those bad boys, put it on an antenna range, test it out and let the decibels fall where they may. All else is just netnews s/n.

Proof would shut us close minded ones up would it not? Then the antenna will become status quo, and we will rush to defend it.

- 73 de Mike KB3EIA -

1669. Re: Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 17:07:13 UTC
From: Bruce in Alaska <bruceg@btpost.net>
Message-ID: <bruceg-47A436.09085024092007@netnews.worldnet.att.net>
Source record: 36099

In article <46f6a883$0$15936$3406c2d1@news.ncia.net>,
Larry <invalid@invalid.com> wrote:

> Does anyone know of a commercial 2 meter antenna made for boats? Fresh
> water exclusively, but this would be mounted on a T-top of a center
> console which is towed, so it would have to be able to be tilted down
> just like the VHF marine antenna. Thanks.

Morad Electronics in Seattle, Washington makes the 156HD Marine Antenna
that is used on better than 90% of the High Seas Fishing Fleet that
fish the North Pacific and Bering Sea. (Deadliest Catch vessels)

Morad also makes a Ham version of the SAME antenna, called the 146HD.

All the Morad Antennas were designed by the legendary Marine
Communications Engineer Eddie Zanbergen (RIP)

I am not affiliated with Morad Electronics, but have installed and
used their products for the last 35 years. There isn't a more
rugged and weather survivable Marine Antenna than those in the
Morad Product line.

Bruce in alaska (AL7AQ) longtime Marine Radioman,
and ex-FCC Inspecter
--
add a <2> before @

1670. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 17:27:05 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190654825.572023.195200@w3g2000hsg.googlegroups.com>
Source record: 36100

On 24 Sep, 10:04, Michael Coslo <m...@psu.edu> wrote:
> John Smith wrote:
> > Richard Fry wrote:
>
> >> _____
>
> >> All I find from you there is more paragraphs of your beliefs -- nothing
> >> in the way of mathematical proof.
>
> >> RF
>
> > "If the facts don't fit the theory, change the facts." --Albert Einstein
>
> So whose facts do I use to build my antenna?
>
> Do I use facts that I have already used to build operable antennas that
> function as claimed, or do I use facts that to my knowledge have not
> ever been used build an antenna,

SNIP
I would go with that one if I were you so you keep apace of your
knoweledge level.
You could look in the archives for this year and look up the "Davis"
mathematical
solutions contribution once in a while so that you can upgrade in the
future
You can work everything that you hear now so hang around until
somebody makes the one I suggested
but then they may be competition minded and not tell you of the work
they have done for themselves!
Art

1671. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 17:27:37 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fd8v8o$qk0$1@news.service.uci.edu>
Source record: 36109

John Smith wrote:

> Jim Lux wrote:
>
> > ...
>
>> Actually, preventing the "tyranny of the majority" is why a lot of
>> laws (and for that matter consitutional provisions) exist. Otherwise
>> you could, to take an extreme example, advocate the speedy euthanasia
>> of all people over the age of 80 (or choose your preferred small
>> minority), on the basis that their health care consumes resources that
>> could better be devoted to improving the life of those that are younger.
>
>
> If that argument had any true merit ...
>
> There are more horse owners in the USA than amateurs, the "tyranny of
> the majority" should be limited and those owners allowed freeway access
> with their horses (which, predate the automobile!); absurd I tell you;
> the reason is blatantly obvious without explanation!
>
> Regards,
> JS

Witness the evolution of National Park to Industrial Park.

jk

1672. Re: Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 17:40:33 UTC
From: "pdrahn@coinet.com" <co_farmer@yahoo.com>
Message-ID: <1190655633.596909.14980@22g2000hsm.googlegroups.com>
Source record: 36101

On Sep 23, 9:27 pm, "Frank" <ve...@spamfree.telus.net> wrote:
> "Roy Lewallen" <w...@eznec.com> wrote in message
>
> news:13fe9a8f1cgpq45@corp.supernews.com...
>
>
>
> > jim...@earthlink.net wrote:
> >> . . .
> >> Whatever you do, you should seriously contemplate basing your work on
> >> the NEC4 engine, rather than the older NEC 2 engine. Sure, you'll
> >> have to pay for it, but it's structured better for what you want to
> >> do, and more accurate to boot.
>
> > I was recently told that the non-commercial NEC-4 license doesn't include
> > source code. I haven't confirmed this, but it's something you should
> > investigate before purchasing an NEC-4 license if you intend to modify the
> > source code.
>
> > You'll also, of course, need a Fortran compiler capable of compiling a
> > multi-threaded application.
>
> > Roy Lewallen, W7EL
>
> I have a non-commercial license, and it came with NEC 4.1 FORTRAN
> source code.
>
> Frank

I'll jump in here without knowing much about the program, but in
general having the Fortran source code doesn't do much to solve your
problem. The function calls to the run-time system is where the
problems will occur. Unless there are versions that support multi-
processors, you are still screwed.

Paul, KD7HB

1673. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 17:40:44 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190655644.512499.133460@g4g2000hsf.googlegroups.com>
Source record: 36102

On 24 Sep, 08:54, "Richard Fry" <r...@adams.net> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1190637042.938968.70990@o80g2000hse.googlegroups.com...> On 24 Sep, 04:15, "Richard Fry" <r...@adams.net> wrote:
> >> You will have more credibility and respect if you post your mathematical
> >> proof so that others can investigate your beliefs using scientific
> >> methods,
> >> rather than persisting in your challenges for others to prove you wrong
> >> based only on your prose.
>
> >> RF
>
> > Already done all that on this newsgroup. Sweep for Gauss or gaussian
> > and it will get you up to date.
>
> __________
>
> All I find from you there is more paragraphs of your beliefs -- nothing
> in the way of mathematical proof.
>
> RF

Sorry to hear that Dr Davis must have removed his comments and data
after the group teed him off
one too many times. They are in my ongoing patent requests so sooner
or later they will
come to light again. I think I may have reproduced it on the
unwin@sdsc.edu pages but I am not sure.
Ofcourse I did have some of my work overchecked on this by professor
with a P.E. who did it via NEC 4 before I placed my first patent
request since each request at the PTO is around $500 and that is only
the beginning costs
so it pays to have the basics reviewed without your presence so you
are not throwing money away' especially if you have a series of
patents going thru based on the original discovery.
Art Unwin KB9MZ
Art

1674. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 17:46:18 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46f7f7d9$0$11011$4c368faf@roadrunner.com>
Source record: 36103

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:HGOJi.35473$RX.20953@newssvr11.news.prodigy.net...
> Jimmie D wrote:
>
>>> On 23 Sep, 12:02, "Dave" <no...@nowhere.com> wrote:
>>>> don't claim that until you have modeled it in full. it "may"
>
>> Who said "may", not me Jimmie
>
> The attributions indicate that Dave said "may".
> --
> 73, Cecil http://www.w5dxp.com

Sorry dont see a Dave on mine, I guess he got on my blocked list somehow

Jimmie

1675. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 18:02:54 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fd8u4e$157i$1@f04n12.cac.psu.edu>
Source record: 36104

Roy Lewallen wrote:
> Ed Cregger wrote:
>>
>> I'm a pessimist, as you have probably concluded.
>>
>> Democracy (yeah, I know, a democratic republic) exists only in fairy
>> tales. When it comes to money, this country's government runs
>> roughshod over the American people's needs every time. NAFTA, GATT and
>> a few other treaties prove this premise to be true. My point is hinged
>> upon the supposition that if there is money to be made in BPL, it will
>> be implemented whether it is good for us or not. Worrying about things
>> that we cannot change is pointless. This comes from a habitual worrier
>> that is trying to get a grip on it. <G>
>>
>> Ed, NM2K
>
> I tend to agree with Ed. But the bright side of the situation is that,
> conversely, if there *isn't* money to be made in BPL, it won't be
> implemented. And it looks like there's a decent chance that's the case.

While BPL could indeed be rammed down our throats, the technology itself is inherently flawed. Other technologies to give out better broadband access at less danger to the consumer,(BPL does not survive trips through transformers, so we'll be getting our BPLband through some pretty high voltage lines. Don't worry though, those isolators work just about almost all the time!

IOW, as you mentioned, the marketplace will take care of all that.

-73 de Mike KB3EIA -

1676. What you always wanted to know about fox hunt antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 18:12:38 UTC
From: "Helmut Wabnig"
Message-ID: <f6vff3huf8e3s79m0bd020ofvkjkrqk074@4ax.com>
Source record: 36106

Here is the text without the images, please download PDF from
http://radiation.weblife.at/main

####################TEXT##################################

What you always wanted to know about Fox Hunt Antennas,
especially the "Tape Measure Antenna".

There are several webpages describing how to calculate the basic
design parameters of three- element Yagi antennas and practical
examples of how to make them out of various materials.
The classic design page is by Joe Leggio, WB2HOL on the webpage
http://pages.videotron.com/ve2jmk/tape_bm.htm Please read, I do not
repeat the contents.

The design is made of PVC tubes and tape measure pieces as radiating
elements. Note the taper of the elements. It seems that the second
element from the left, the radiating dipole, is tapered more than an
estimated linear decrease. Further note, that the center element is
positioned more to the left. We will soon discuss what that tells us.

(Image from the Leggio page)

The Leggio design is based on non-conductive boom material. Note that
the front part of the antenna is quite long as seen from the center
dipole. The distance will only be correct when we use an insulator as
boom carrier. On the contrary, the left half is shorter, and there is
the cable running along the center from the radiator to the leftmost
element, the reflector. The non-conducting boom design is defunct now,
on that part of the antenna. Therefore the calculated element
distances will have to be changed. There is no need for a galvanic
connection at the center of the reflector element, because the voltage
in the center point is zero anyhow and no current will flow between
reflector and boom. So we have a boom design of half a conductive and
half non-conductive material, effectively. All electromagnetic waves
shorten their wavelengths when entering a medium, and waves travelling
along a conductor have a shorter wavelength than in free space.

To aid our calculations we may use the software YagiCad4.1 from here
http://www.ipass.net/teara/kq3.html and a ready made recipe from
there http://home.att.net/~jleggio/projects/rdf/tape1.zip
That little gem can be learned and mastered within 15 minutes, while
also very fine, good and marvellous pieces of software like
http://home.ict.nl/~arivoors/ will take you five weeks to master. For
the design of our fox-hunt 3 element yagis, the YagiCad is sufficient.
As a homework, go and enter the original WB2HOL data into YagiCad.

Surprised?

Well, let me skip and leap forward. I do not intend to write a YagiCad turorial here. To proceed with the story, and come to the more interesting part, let me tell you how my copy of that antenna worked: it did not. It was clumsy and heavy because good PVC is not available here, and I of course scaled the design from the 146,565 mentioned by Joe Leggio up to 150 MHz by percent-wise shrinking every part. Time to look around.

The Cebik pages, W4RNL.

May those pages last forever: http://www.cebik.com .
For the topic chosen we must read http://www.cebik.com/ao/ao1.html .

Let us jump into medias res:
(Image from Cebik page)

Foxhunting requires good front-to-back ratio, and not maximum gain. In most cases the frequency used will be given and will not change, so we may design an antenna with our desired frequency as center frequency, using YagiCad. By varying the overall length of the antenna we find out that length influences gain. Positioning the centre element, the active dipole, we notice that the position influences the forward-to-back ratio. Because everything influences everything else on an antenna, the observations we make will not be as clear from the beginning , but after a while of experimenting we get the feeling. Let YagiCad do the optimising. Compare the results with the recipes given by Cebik. Note, that both sources assume a non-conducting boom, and the obtained numbers refer to isolated elements
in air.

What happens when we use an antenna a few megahertz above or below the nominal design frequency? Gain will not change much. Impedance will change somewhat, but we are less concerned about when doing fox hunts. What changes most, is the F/B ratio, actually it changes catastrophically if only a few hundred kilohertz off center. That quickly renders an antenna useless, and especially beginners then claim to hear signals "from all directions". Impossible to distinguish between direct signal and reflections and the reception from 180ï¿½ backwards. And do you really expect your home made antenna to be as good as the data from your calculations? Do you expect the wire skeleton to resonate precisely at your target frequency? Remember, even the coax cable to the rear has an influence, and what if your boom is constructed of metal?

Optimizing F/B ratio on real antennas.

You guess, just make the center element, the driven dipole, moveable. The direct advancement is that we can equal out manufacturing tolerances and practically unknown parameters of small influence. But the main achievement is that we can precisely adjust the front to back ratio for our desired frequency. We will never be able to reach the 57

dB which theory promises, but we get the best out of our real existing home made marvel. Then we may be able to do a nice observation.

A tape measure antenna with metal boom, working at the correct design frequency, and adjusted to best F/B ratio at 150 MHz.
Compare the setup with the Leggio and with the Cebik images.
To the left (out of sight) is a noise generator, transmitter PA and a transmitting log-periodic antenna. The analyzer displays what the receiving antenna delivers.

What does this tell us? Obviously the
Leggio Antenna is detuned from its
center design frequency. It may work
or not, if you copy the design for your
purpose. Make the center T on the PVC
boom moveable, success guaranteed!

Final remarks.

'Nuff said, just a few additional pictures.

The slider, top view. Side view,
elements mounted.

Do we need an attenuator? Absolutely!
In some cases an offset attenuator may be recommended, especially if you know the precise frequency of the target, the "fox", but sometimes we are better off with direct frequency equipment, especially when searching for radio interference sources.

Element mount (director)

To the right and below: Complete fox hunt equipment, antenna,
attenuator
and receiver.

By Helmut Wabnig, OE8UWW, Sept. 2007.

1677. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 18:13:16 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fd8uo3$157m$1@f04n12.cac.psu.edu>
Source record: 36105

Ed Cregger wrote:
> John Smith wrote:
>> John Smith I wrote:
>>> http://www.itbusinessedge.com/blogs/cip/?p=170
>>>
>>> Regards,
>>> JS
>>
>> http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/09-19-2007/0004666248&EDATE=
>>
>>
>> JS
>
>
> Why is anyone worrying about the BPL thing? It is pointless to worry
> about things that you cannot change, even when detrimental to you. Worry
> is non productive.
>
> There is simply no way in hell that the needs of .5 million folks will
> supersede the needs of 300 million folks. Sorry, but it just isn't going
> to happen.

Oy! Take a deep breath Ed! Tisn't that bad, and you're being way too pessimistic. Right ends up winning out, sometimes just takes a while.

At any rate, it isn't 300 million people, It's just those who can't be served much of any other way. And that isn't too many. Even then, it isn't going to serve those people, unless the utilities run fiber until the "last mile". BPL does not survive trips through the power lines very well, so fiber is needed almos to the house. And the fiber is what we want. And once the fiber is there, why not use a technologically better system to deliver it that last mile.

Hey! I have an idea. Give me that good fiber signal!!

Sometimes I think that BPL is just a trick to get Power utilities to string up fiber so that private sector companies don't have to. Fiber up, and once BPL falls on it's face, private companies come in and start distributing fast broadband.

> Instead of fretting and whining, why not try to come up with work arounds?
>
> For instance, digital phone is probably much more able to handle the BPL
> noise than analog phone. Get busy! <G>

I'm not sure that digital phone would be better. You'll have one S9+ signal interfering with what will almost certainly be a much weaker digital signal.

- 73 de Mike KB3EIA -

1678. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 18:23:57 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fd8vbt$157o$1@f04n12.cac.psu.edu>
Source record: 36107

art wrote:
> On 24 Sep, 10:04, Michael Coslo <m...@psu.edu> wrote:
>> John Smith wrote:
>>> Richard Fry wrote:
>>>> _____________
>>>> All I find from you there is more paragraphs of your beliefs -- nothing
>>>> in the way of mathematical proof.
>>>> RF
>>> "If the facts don't fit the theory, change the facts." --Albert Einstein
>> So whose facts do I use to build my antenna?
>>
>> Do I use facts that I have already used to build operable antennas that
>> function as claimed, or do I use facts that to my knowledge have not
>> ever been used build an antenna,
>
> SNIP
> I would go with that one if I were you so you keep apace of your
> knoweledge level.

Sheesh, Art. How come every one who questions you is some kind of dullard, or worse? Even those who aren't questioning you, such as myself. Your antenna might be the best thing since sliced bread, but I'm not saying it isn't, I'm saying show me.

It must be an interesting world where only those who agree with you are intelligent or clever, and all those who have the temerity to even ask questions, wanting proof, are not.

- 73 de Mike KB3EIA -

1679. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 18:28:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7vvff31v56tkv8njjdghu8oeb6rjluk4uq@4ax.com>
Source record: 36108

On Mon, 24 Sep 2007 10:40:44 -0700, art <aunwin@insightbb.com> wrote:

>I think I may have reproduced it on the
>unwin@sdsc.edu pages but I am not sure.

Hi Arthru,

"Not sure" seems to be the keyword. Lack of details, lack of
background, lack of examples, and lack of understanding (no shortage
of ersatz thinking) reveals to others what is not obvious to you:
an email address is not a web page

But we all know what you don't mean. :-0

Yes, it must be tough to be a towering generous in exotic theries when
you stumble so often from tying your gaussian shoelaces together.

73's
Richard Clark, KB7QHC

1680. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 18:42:19 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190659339.840419.263950@n39g2000hsh.googlegroups.com>
Source record: 36110

On 24 Sep, 11:23, Michael Coslo <m...@psu.edu> wrote:
> art wrote:
> > On 24 Sep, 10:04, Michael Coslo <m...@psu.edu> wrote:
> >> John Smith wrote:
> >>> Richard Fry wrote:
> >>>> _____________
> >>>> All I find from you there is more paragraphs of your beliefs -- nothing
> >>>> in the way of mathematical proof.
> >>>> RF
> >>> "If the facts don't fit the theory, change the facts." --Albert Einstein
> >> So whose facts do I use to build my antenna?
>
> >> Do I use facts that I have already used to build operable antennas that
> >> function as claimed, or do I use facts that to my knowledge have not
> >> ever been used build an antenna,
>
> > SNIP
> > I would go with that one if I were you so you keep apace of your
> > knoweledge level.
>
> Sheesh, Art. How come every one who questions you is some kind of
> dullard, or worse? Even those who aren't questioning you, such as
> myself. Your antenna might be the best thing since sliced bread, but I'm
> not saying it isn't, I'm saying show me.
>
> It must be an interesting world where only those who agree with you are
> intelligent or clever, and all those who have the temerity to even ask
> questions, wanting proof, are not.
>
> - 73 de Mike KB3EIA -- Hide quoted text -
>
> - Show quoted text -

Dear Michael from the past I was called every name under the sun on
past patents
This time I gave the basis of the mathematics, I gave a array of full
wave
elements that was checked independently on this newsnet. I also put
up a page
with the data and drawings from a static field ala Gauss on to a
dynamic form
where it can be verivied by computor programs.
All I got was jeers and insults there is nothing more that I can do
other what I have done

I can't make you make one even with instructions and I am not giving
out gifts.
Oh and you got the benefit of Dr Davis's mathematical analysis to boot
before the group dissed him to.
Art Unwin KB9MZ.....XG

1681. Re: coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 18:43:54 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46f80560$0$32540$4c368faf@roadrunner.com>
Source record: 36111

"Walter Maxwell" <walt@w2du.com> wrote in message
news:tekbf39rqj7qn1eqb8195vglkl6codd1pj@4ax.com...
> On Sat, 22 Sep 2007 08:14:58 -0700, art <aunwin@insightbb.com> wrote:
>
>>On 15 Sep, 19:16, WillW...@gmail.com wrote:
>>> I have built several coaxial dipole antennas in the past with great
>>> success. What I like about this antenna is it is broadbanded. If you
>>> design it using the center of the band of your interest, for the most
>>> part you can cover the entire band without retuning. The problem I
>>> have always had with this is the antenna is somewhat fragile. I have
>>> used plexiglass squares to secure the center of the antenna and taped
>>> nylon fishing line to the legs for more strengh. Any one with more
>>> ideas? These are mostly useful in the HF range. You can find the info
>>> on designing these athttp://www.amateurradios.info and other places
>>> on the net.
>>>
>>> 73's
>>> Bill w5grx
>>
>>BILL
>>The best way of using coax with antennas is by stripping the PVC and
>>soaking the braid
>>in polyurothane so the clock wise windings are insulated from the
>>counter wound windings
>>By shorting one end of the braiding you can feed the other end i.e.
>>the two different windings
>>2where the actual span is somewhat less than a 1/2 wave (calculate
>>the true wire length)
>>The same can be accomplished by using somewhat less than a full wave
>>length folded back on itself
>>and directly feed the ends. This arrangement takes the fragility away
>>from the span by not feeding at the center
>>as well as using the center wire of the coax for mechanical strength.
>>This method comes in quite usefull when the need is for a 160 meter
>>antenna where you can wind the coax cross wise fashion so the ends for
>>feeding finish together.
>>This comes out at around 60 turns on a 2 foot former. This method
>>gives more gain over 1/2 wave designs in a similar way that a quad or
>>loop of one wavelength exceeds others. You can also use a single wire
>>instead of coax for cheapness if you wish but ofcourse you like coax
>>but this way you can join scraps of coax and solder them together
>>without bothering with individual strands. This method by the way does
>>not require a ground plane so you may leave the barrel on the ground
>>or place it on top of the tower for rotation purposes. You can have a

>>lot of fun with this antenna if you can also rotate the axis of the
>>barrel by useing two rotators or a combination satelite version.
>>Note thatusing a full wave length antenna you achieve tha same
>>gains(~ 3db) that a quad obtains over the standard fractional WL
>>length radiator(~2db when using single wire). Feed impedance is around
>>50/60 ohms resistive and is quite broad banded. The above is based
>>around Gausswian formulae that also conforms with Maxwellian laws so
>>you can use suitable modeling programs such as AO to derive all
>>specifications. The above is subject to possible U.S. patents
>>acceptance at this time
>>Enjoy
>>Regards
>>Art
>>KB9MZ....XG
>
> Art, I'm curious concerning what kind of mind-enhancing substance you were
> on when you wrote the above post.
> As far as I can tell, this post concerns the coaxial dipole. However, I
> don't discern any relationship between
> your post and the coaxial dipole.
>
> What does "60 turns on a 2 foot former" have to do with the coaxial
> dipole?
>
> And what is the "barrell" that you can leave on the ground or put on the
> top of the tower for rotation
> purposes? Rotation of an 80-meter dipole with a barrell on the top of the
> tower? Art, you have been smoking
> too much liquid polyurethane in your Gaussian pipe.
>
> Walt, W2DU

ROTFLMAO

Jimmie

1682. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 19:21:37 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <46F80E41.2000000@bellsouff.net>
Source record: 36112

Tom Corker wrote:
> OK, I've built my J-pole and it's looking quite good. In the end, I
> went for 22mm copper tubing as I had some spare. I've still not
> decided on the coax though. I've measured the run, and I'll be needing
> 12 meters (39 feet). In addition to the RG213, I've managed to find a
> source of 'low-loss mini 8' (RG-8X). The RG213 is ï¿½1.40 per meter, and
> the RG-8x is ï¿½0.65
> per meter. Is the RG213 worth the difference on VHF?
>
> Thanks for all your advice and help.
>

To me, no, it isn't worth the difference in price, nor the hassle in handling the thicker coax. Were I working weak signal modes, it might be a different matter, but then I would use hardline or 9913 at the minimum.

Ed, NM2K

1683. Re: Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 19:23:38 UTC
From: oeguet@gmx.de
Message-ID: <1190661818.933468.321550@g4g2000hsf.googlegroups.com>
Source record: 36113

Hello Roy,

> That would be if you're doing finegrained parallelism (e.g. using a
> multiprocessor BLAS library. Several of the strategies (dividing it
> up by frequency) could actually be done by a reasonably simple shell
> script/batch file that fires off the executable on different
> processors with different input files. For my own NEC on a Cluster
> runs, I've done the separate runs on separate machines and merge the
> output files in post processing strategy.

Using Clusters, remembers me to my past university days. Indeed, I used up to 20-60 personal computers on the computer centre, to compute a ray-tracing movie. That was in the 90´th.
How do you handle the process communication? And how do you handle the results?
There are more reasonably possibilities to speed up antenna calculation and in special case of course optimizing too. The reason, why I am want to speed up is, that antenna optimizing takes a lot of time. I am often using the optimizing tool of 4nec2. It is a very nice feature of 4nec2, to parameterize the antanne elements using mathematical formulas. Anyone here, using this feature extensiv?
Aziz

1684. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 20:10:58 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <mRUJi.634$hI7.473@newssvr17.news.prodigy.net>
Source record: 36114

art wrote:
> That of course takes a lot of tenaccity and visits to the texas
> university library ...

Now you've really got my dander up, Art.
It's the Texas Aggie library. :-)
--
73, Cecil http://www.w5dxp.com

1685. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 20:20:35 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <o_UJi.635$hI7.272@newssvr17.news.prodigy.net>
Source record: 36115

Tom Corker wrote:
> Is the RG213 worth the difference on VHF?

Only you can answer that question. For 12 meters on a
flat line on 2m, RG213 has ~1dB loss and RG8x has
~1.5dB of loss. (LMR400 has ~0.6dB of loss.) Is
double the price worth 0.5dB to you?

http://www.vk1od.net/tl/tllc.php
--
73, Cecil http://www.w5dxp.com

1686. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 20:23:54 UTC
From: Dave <noone@nowhere.com>
Message-ID: <u1VJi.4128$Pc3.3157@trndny09>
Source record: 36116

"art" <aunwin@insightbb.com> wrote in message
news:1190594700.300659.26440@o80g2000hse.googlegroups.com...
> On 23 Sep, 16:10, "Dave" <no...@nowhere.com> wrote:
>> "John Smith" <assemblywiz...@gmail.com> wrote in message
>>
>> news:fd6okfukb1@news.albasani.net...
>>
>>
>>
>> > Dave wrote:
>> > > ...
>> >> ok... now if you have a LAW that is different than what is put down in
>> >> the existing maxwell's 4 equations you must be able to write the
>> >> equations that make your law different than his. if you can't do
>> >> that,
>> >> its no better than a bag of hot air. so show your calculations, write
>> >> a
>> >> paper, get it published and show the rest of the world that uses those
>> >> equations and gets perfectly valid results why we are all wrong.
>>
>> > Who are you to tell him to shut up? Don't you realize you only manage
>> > to
>> > make yourself look the idiot?--Well of course not, that is quite
>> > obvious!
>>
>> > You think you will tell the rest of us how to conduct ourselves when
>> > you
>> > are finished with him?
>>
>> > Just where in the hell do you come from? And, what the hell makes you
>> > have any right whatsoever to do so?
>>
>> > Go away--PLONK!
>>
>> > JS
>>
>> go plonk yourself... i am simply challenging someone who has shown
>> himself
>> to be full of hot air to properly explain his revolutionary law that has
>> evaded the rest of the world, and who has been handwaviing and telling
>> everyone that he has this great new law... but can never explain it in
>> terms
>> that anyone understands... just more handwaving and generalizing. if you
>> can't take a challenge then you don't belong on usenet. and art sure

>> doesn't need you to defend him, he does well enough to make an ass of
>> himself.- Hide quoted text -
>>
>> - Show quoted text -
>
> Bull. A ham who holds a doctorate and works for MIT provided the
> corroberating details.
> It is not my fault that your mathematical knoweledge and education
> could not keep up with him which is the same for all others on the
> thread. Nobody but nobody could fault his mathematics and you call
> that just "hand waving"?
> David it was you who led the charge and consistently stated that you
> can't apply a time varient to a static field and refused to
> acknowledge that the math supplied that concurred with Maxwells laws
> relying only on the fact that it came from your own mouth so it must
> be correct. Now that I call "handwaving" all mouth and no facts
> proffered to confirm your opinions or guesstimates. Now you say you
> should be able to take a "challenge" well I invite any scientifically
> based challenge some thing I have hoped for in a long while from the
> self professeed experts and am still waiting.
> I can understand opinions from hobbiests you have joined the ranks of
> ham radio but for those skilled in the art and have gone thru the
> reqimen of getting a degree or obtaining the rights of a professional
> engineer one would expect a more factual debate on the subject. If you
> don't understand the subject then you default your right to critisize.
> Now I have Richard firing his nonsense across my bow with the
> credentials of a degree in geography that trumps all others in the
> hope that he can get somebody to talk to him.
> Have a happy day to all
> Art Unwin KB9MZ......ex UK.
>

ah well art... i guess i have riled you up enough this time, its not any fun
any more though. you don't have anything new to offer, just pointing to old
discreditted information and posts that don't exist. I have quoted enough
of my credentials that by now you should know i can follow whatever math you
may throw up, or puke up as the case may be, on this forum. and i'm not
going to bother to go search for your mythical patents and papers any more,
publish the full links here or forever be labeled a faker.

1687. Re: What you always wanted to know about fox hunt antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 20:29:41 UTC
From: Dave <noone@nowhere.com>
Message-ID: <V6VJi.4984$X23.2139@trndny04>
Source record: 36117

while this may be good about yagi antennas, that is only one type of antenna used in fox hunts. they are usually good for long distance hunting, but tend to be too broad for close in work. loop/sense antenna combinations with a deep cardiod pattern null are another type that is very useful, even plain loops with good side nulls are helpful. then there are also the various forms of 'doppler' antennas. beside the classic 4 vertical doppler design that is usually limited to car top applications there is a simple 2 vertical design that is good for use on foot. and example of that is at: http://www.k1ttt.net/technote/doppler.html

"Helmut Wabnig" <.... .-- .- -... -. .. --. @ .- --- -. dot .- - > wrote in message news:f6vff3huf8e3s79m0bd020ofvkjkrqk074@4ax.com...
> Here is the text without the images, please download PDF from
> http://radiation.weblife.at/main
>
> ####################TEXT####################################
>
>
> What you always wanted to know about Fox Hunt Antennas,
> especially the "Tape Measure Antenna".
>
>
> There are several webpages describing how to calculate the basic
> design parameters of three- element Yagi antennas and practical
> examples of how to make them out of various materials.
> The classic design page is by Joe Leggio, WB2HOL on the webpage
> http://pages.videotron.com/ve2jmk/tape_bm.htm Please read, I do not
> repeat the contents.
>
> The design is made of PVC tubes and tape measure pieces as radiating
> elements. Note the taper of the elements. It seems that the second
> element from the left, the radiating dipole, is tapered more than an
> estimated linear decrease. Further note, that the center element is
> positioned more to the left. We will soon discuss what that tells us.
>
>
> (Image from the Leggio page)
>
>
> The Leggio design is based on non-conductive boom material. Note that
> the front part of the antenna is quite long as seen from the center
> dipole. The distance will only be correct when we use an insulator as
> boom carrier. On the contrary, the left half is shorter, and there is
> the cable running along the center from the radiator to the leftmost

> element, the reflector. The non-conducting boom design is defunct now,
> on that part of the antenna. Therefore the calculated element
> distances will have to be changed. There is no need for a galvanic
> connection at the center of the reflector element, because the voltage
> in the center point is zero anyhow and no current will flow between
> reflector and boom. So we have a boom design of half a conductive and
> half non-conductive material, effectively. All electromagnetic waves
> shorten their wavelengths when entering a medium, and waves travelling
> along a conductor have a shorter wavelength than in free space.
>
> To aid our calculations we may use the software YagiCad4.1 from here
> http://www.ipass.net/teara/kq3.html and a ready made recipe from
> there http://home.att.net/~jleggio/projects/rdf/tape1.zip
> That little gem can be learned and mastered within 15 minutes, while
> also very fine, good and marvellous pieces of software like
> http://home.ict.nl/~arivoors/ will take you five weeks to master. For
> the design of our fox-hunt 3 element yagis, the YagiCad is sufficient.
> As a homework, go and enter the original WB2HOL data into YagiCad.
> Surprised?
>
> Well, let me skip and leap forward. I do not intend to write a YagiCad
> turorial here. To proceed with the story, and come to the more
> interesting part, let me tell you how my copy of that antenna worked:
> it did not. It was clumsy and heavy because good PVC is not available
> here, and I of course scaled the design from the 146,565 mentioned by
> Joe Leggio up to 150 MHz by percent-wise shrinking every part. Time to
> look around.
>
> The Cebik pages, W4RNL.
>
> May those pages last forever: http://www.cebik.com .
> For the topic chosen we must read http://www.cebik.com/ao/ao1.html .
>
> Let us jump into medias res:
> (Image from Cebik page)
>
> Foxhunting requires good front-to-back ratio, and not maximum gain. In
> most cases the frequency used will be given and will not change, so we
> may design an antenna with our desired frequency as center frequency,
> using YagiCad. By varying the overall length of the antenna we find
> out that length influences gain. Positioning the centre element, the
> active dipole, we notice that the position influences the
> forward-to-back ratio. Because everything influences everything else
> on an antenna, the observations we make will not be as clear from the
> beginning , but after a while of experimenting we get the feeling. Let
> YagiCad do the optimising. Compare the results with the recipes given
> by Cebik. Note, that both sources assume a non-conducting boom, and
> the obtained numbers refer to isolated elements
> in air.

>
> What happens when we use an antenna a few megahertz above or below the
> nominal design frequency? Gain will not change much. Impedance will
> change somewhat, but we are less concerned about when doing fox hunts.
> What changes most, is the F/B ratio, actually it changes
> catastrophically if only a few hundred kilohertz off center. That
> quickly renders an antenna useless, and especially beginners then
> claim to hear signals "from all directions". Impossible to distinguish
> between direct signal and reflections and the reception from 180°
> backwards. And do you really expect your home made antenna to be as
> good as the data from your calculations? Do you expect the wire
> skeleton to resonate precisely at your target frequency? Remember,
> even the coax cable to the rear has an influence, and what if your
> boom is constructed of metal?
>
> Optimizing F/B ratio on real antennas.
>
> You guess, just make the center element, the driven dipole, moveable.
> The direct advancement is that we can equal out manufacturing
> tolerances and practically unknown parameters of small influence. But
> the main achievement is that we can precisely adjust the front to back
> ratio for our desired frequency. We will never be able to reach the 57
> dB which theory promises, but we get the best out of our real existing
> home made marvel. Then we may be able to do a nice observation.
>
> A tape measure antenna with metal boom, working at the correct design
> frequency, and adjusted to best F/B ratio at 150 MHz.
> Compare the setup with the Leggio and with the Cebik images.
> To the left (out of sight) is a noise generator, transmitter PA and a
> transmitting log-periodic antenna. The analyzer displays what the
> receiving antenna delivers.
>
> What does this tell us? Obviously the
> Leggio Antenna is detuned from its
> center design frequency. It may work
> or not, if you copy the design for your
> purpose. Make the center T on the PVC
> boom moveable, success guaranteed!
>
>
> Final remarks.
>
> 'Nuff said, just a few additional pictures.
>
> The slider, top view. Side view,
> elements mounted.
>
>
> Do we need an attenuator? Absolutely!

> In some cases an offset attenuator may be recommended, especially if
> you know the precise frequency of the target, the "fox", but sometimes
> we are better off with direct frequency equipment, especially when
> searching for radio interference sources.
>
> Element mount (director)
>
>
> To the right and below: Complete fox hunt equipment, antenna,
> attenuator
> and receiver.
>
> By Helmut Wabnig, OE8UWW, Sept. 2007.
>

1688. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 20:30:19 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <w7VJi.638$hI7.334@newssvr17.news.prodigy.net>
Source record: 36118

John Smith wrote:
> Uncounted times, math is reshuffled to come into line with present
> knowledge--the reverse has NEVER happened--at least not to my knowledge.

Actually, the reverse has happened several times now
in quantum physics. The math (standard model) has predicted
bizarre, seemingly impossible things, e.g. entanglement
(Einstein's spooky action at a distance) which was later
proved by experiments to be a fact of reality.

You can find some pretty brilliant physicists who will
state that the QEM model has never been wrong no matter
how unbelievable the predictions.
--
73, Cecil http://www.w5dxp.com

1689. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 20:33:29 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fd96up$26v$1@news.albasani.net>
Source record: 36119

Michael Coslo wrote:

> ...
> Build one of those bad boys, put it on an antenna range, test it out and
> let the decibels fall where they may. All else is just netnews s/n.
>
> Proof would shut us close minded ones up would it not? Then the
> antenna will become status quo, and we will rush to defend it.
>
>
> - 73 de Mike KB3EIA -

A million visions hit me where the status quo is unusable--college dorms, hotel rooms, camping grounds in national forests, secure-elite-gated communities where "keeping up with the joneses" is in vogue (and, I am stuck in one--for a bit anyway :-( ), a beach, etc., etc.

I have already stated, canned antennas and the software to define them have a REAL place ... it is only the idiots who shout down everyone else who are in question! Personally, I need the art of small/stealth antennas to expand ... I can't believe I am the only one; I am just more vocal to their importance.

I have already had complaints about the American Flag flying on my 50 ft. pole, so far, NOT flying the flag has appeased the "complainers"--go figure! Any day now, they will eventually notice the pole is still there. Then I'll be stuck with the DLM posing as a drain pipe ...

And, there are errors and missing sections in our complete understanding of antennas, em/photon radiation, etc.--those who will bother to examine the evidence already know this--those who are either unable or unwilling to do so never will.

Regards,
JS

1690. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 20:56:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fd989o$689$1@news.albasani.net>
Source record: 36120

Cecil Moore wrote:

> ...
> Actually, the reverse has happened several times now
> in quantum physics. The math (standard model) has predicted
> bizarre, seemingly impossible things, e.g. entanglement
> (Einstein's spooky action at a distance) which was later
> proved by experiments to be a fact of reality.
>
> You can find some pretty brilliant physicists who will
> state that the QEM model has never been wrong no matter
> how unbelievable the predictions.

Cecil:

How come I already knew you would be first to propose an argument worthy of consideration/debate? :-)

I spoke boldly, and of course, in too broad of terms--the reasons for such I have already stated.

However, even Einstein would admit (well, if he would allow me to speak for him) that there is "something too all this, alright. However, by the shear lack of a simple model to explain it all--we still are only seeing the tail on the elephant ..."

And, by the way, thanks for the wakeup call.

Warm regards,
JS

1691. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 21:18:38 UTC
From: nm5k@wt.net
Message-ID: <1190668718.295659.12630@o80g2000hse.googlegroups.com>
Source record: 36121

On Sep 24, 12:04 pm, Michael Coslo <m...@psu.edu> wrote:

>
> Build one of those bad boys, put it on an antenna range, test it out and
> let the decibels fall where they may. All else is just netnews s/n.

I've told him that a hundred times... He won't listen.
How does he expect anyone to give his antenna much of a
chance when the "theory" he provides is generally caca, and
he refuses to build an actual working antenna to demo and test?
What a load of @#$%...
Art and his groupies just don't get it.
It's not that anyone is against new ideas, antennas, etc,
ad nausium.
Just don't feed us a turd and call it a steak if one can't even
take the trouble to build a working example to test. :/
If I had some new whiz bang antenna cooked up, I would build
and test one first, and then talk about it later if it actually was
proven to work.
Art goes the other route. He talks a great storm, but nothing is
ever produced to actually test in the real world.
As far as I see it, that is no way to live.
MK

1692. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 21:24:44 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fd99uu$9mv$1@news.albasani.net>
Source record: 36122

Jim Kelley wrote:

> ...
> Witness the evolution of National Park to Industrial Park.
>
> jk
>

Like some of the Asian countries? You must wait for an opening to be buried; you can only be buried for a spell; then, you are dug up to make room for the next one?

Progress, and over-population, does come at some cost ... :-(

Regards,
JS

1693. Re: Beverage Antenna, Noise pickup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 21:35:58 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <33bgf3tv9pcsn3rt604urdkbt8p2s5qf45@4ax.com>
Source record: 36123

On Mon, 24 Sep 2007 00:29:54 -0700, nm5k@wt.net wrote:

>On Sep 23, 11:41 am, rickn...@hotmail.com (Rick) wrote:
>> I was reading in ON4UNs book, a section about Beverage antennas and decided to
>> do some checking on mine, which is celebrating its ten year anniversary this
>> month.

snip

This comment isn't re noise with the Beverage, but I believe it might be found interesting to those interested
in Beverage antennas. Below is a quote from an article I published a few months ago in QST.

The Beverage Antenna in WW2
by W2DU

As a monitoring officer with the Radio Intelligence Division (RID) of the FCC in Hawaii during WW2 I was
privy to some interesting situations. Our State Department was of course aware of the operations occurring in
the Pacific Theater. The people there were also aware of the propaganda being spewed by the Japanese
short-wave broadcasters. But State was curious concerning what the Japanese living on the homeland were being
told-were they being told the truth, or the same propaganda as told on the short-wave broadcasts, or a totally
different story. State asked the RID to determine whether we could obtain such information.
We cruised the AM broadcast band and found several nighttime signals from Japanese mainland stations, but
most were too weak to copy. However, JOAK, Tokyo, on 640 KHz was S9, but there was a problem in copying it.
KFI, Los Angeles, was also on 640 KHz with an S9 signal-copying intelligence from JOAK was impossible. How can
we eliminate, or reduce KFI's signal level. A Beverage Wave antenna, perhaps?
We then proceeded to the northern portion of Oahu and constructed a Beverage one-half mile long, five
feet above ground, aimed at Tokyo, and terminated with a 1000-ohm pot resistor to ground at the Tokyo end. We
discovered that by varying the pot resistance we could null the KFI signal to almost zero. The resistance
terminating the Beverage that produced the null was around 600 ohms. Because the matching resistive
termination rendered the Beverage a traveling-wave antenna with no standing wave, the signal from JOAK was
terminated by the input of our receiver, while the signal from KFI was dissipated in the matched resistance at

the Tokyo end of the Beverage-no KFI signal reflected toward the receiver. Voila-JOAK was perfectly readable
for recording!
We sent the first recording to Washington, and State was delighted-requesting that we continue recording
JOAK continuously. Consequently, our recordings were flown daily to Washington from Hickam Field in Honolulu.
We were left in the dark concerning the information on the recordings, and how it affected the War effort,
because State didn't share it with us. But it must have been pretty good, because State was on our case every
day to make sure we sent them the recordings.

Walt, W2DU

1694. Re: coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 21:41:28 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <fkbgf393eo2kmebpuvfo7tph035rvt77ft@4ax.com>
Source record: 36124

On Mon, 24 Sep 2007 14:43:54 -0400, "Jimmie D" <GFENDER@carolina.rr.com> wrote:

>
>"Walter Maxwell" <walt@w2du.com> wrote in message
>news:tekbf39rqj7qn1eqb8195vglkl6codd1pj@4ax.com...
>> On Sat, 22 Sep 2007 08:14:58 -0700, art <aunwin@insightbb.com> wrote:

>> Art, I'm curious concerning what kind of mind-enhancing substance you were
>> on when you wrote the above post.
>> As far as I can tell, this post concerns the coaxial dipole. However, I
>> don't discern any relationship between
>> your post and the coaxial dipole.
>>
>> What does "60 turns on a 2 foot former" have to do with the coaxial
>> dipole?
>>
>> And what is the "barrell" that you can leave on the ground or put on the
>> top of the tower for rotation
>> purposes? Rotation of an 80-meter dipole with a barrell on the top of the
>> tower? Art, you have been smoking
>> too much liquid polyurethane in your Gaussian pipe.
>>
>> Walt, W2DU
>
>
>ROTFLMAO
>
>Jimmie
>
Jimmie, will you please translate 'ROTFLMAO' ? My dimwitted brain can't figure out what you mean.

Walt, W2DU

1695. Re: Beverage Antenna, Noise pickup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 21:45:54 UTC
From: nm5k@wt.net
Message-ID: <1190670354.830306.125750@y42g2000hsy.googlegroups.com>
Source record: 36125

On Sep 24, 4:35 pm, Walter Maxwell <w...@w2du.com> wrote:
> On Mon, 24 Sep 2007 00:29:54 -0700, n...@wt.net wrote:
> >On Sep 23, 11:41 am, rickn...@hotmail.com (Rick) wrote:
> >> I was reading in ON4UNs book, a section about Beverage antennas and decided to
> >> do some checking on mine, which is celebrating its ten year anniversary this
> >> month.
>
> snip
>
> This comment isn't re noise with the Beverage, but I believe it might be found interesting to those interested
> in Beverage antennas. Below is a quote from an article I published a few months ago in QST.
>
> The Beverage Antenna in WW2
> by W2DU
>
> As a monitoring officer with the Radio Intelligence Division (RID) of the FCC in Hawaii during WW2 I was
> privy to some interesting situations. Our State Department was of course aware of the operations occurring in
> the Pacific Theater. The people there were also aware of the propaganda being spewed by the Japanese
> short-wave broadcasters. But State was curious concerning what the Japanese living on the homeland were being
> told-were they being told the truth, or the same propaganda as told on the short-wave broadcasts, or a totally
> different story. State asked the RID to determine whether we could obtain such information.
> We cruised the AM broadcast band and found several nighttime signals from Japanese mainland stations, but
> most were too weak to copy. However, JOAK, Tokyo, on 640 KHz was S9, but there was a problem in copying it.
> KFI, Los Angeles, was also on 640 KHz with an S9 signal-copying intelligence from JOAK was impossible. How can
> we eliminate, or reduce KFI's signal level. A Beverage Wave antenna, perhaps?
> We then proceeded to the northern portion of Oahu and constructed a Beverage one-half mile long, five
> feet above ground, aimed at Tokyo, and terminated with a 1000-ohm pot resistor to ground at the Tokyo end. We
> discovered that by varying the pot resistance we could null the KFI signal to almost zero. The resistance
> terminating the Beverage that produced the null was around 600 ohms. Because the matching resistive

> termination rendered the Beverage a traveling-wave antenna with no standing wave, the signal from JOAK was
> terminated by the input of our receiver, while the signal from KFI was dissipated in the matched resistance at
> the Tokyo end of the Beverage-no KFI signal reflected toward the receiver. Voila-JOAK was perfectly readable
> for recording!
> We sent the first recording to Washington, and State was delighted-requesting that we continue recording
> JOAK continuously. Consequently, our recordings were flown daily to Washington from Hickam Field in Honolulu.
> We were left in the dark concerning the information on the recordings, and how it affected the War effort,
> because State didn't share it with us. But it must have been pretty good, because State was on our case every
> day to make sure we sent them the recordings.
>
> Walt, W2DU

Thanks for the add Walt. Gives me the idea to try a pot instead of a
fixed resister,
so I can tweak it for best results.
MK

1696. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 21:52:19 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190670739.908867.117160@50g2000hsm.googlegroups.com>
Source record: 36126

On 24 Sep, 14:18, n...@wt.net wrote:
> On Sep 24, 12:04 pm, Michael Coslo <m...@psu.edu> wrote:
>
>
>
> > Build one of those bad boys, put it on an antenna range, test it out and
> > let the decibels fall where they may. All else is just netnews s/n.
>
> I've told him that a hundred times... He won't listen.
> How does he expect anyone to give his antenna much of a
> chance when the "theory" he provides is generally caca, and
> he refuses to build an actual working antenna to demo and test?
> What a load of @#$%...
> Art and his groupies just don't get it.
> It's not that anyone is against new ideas, antennas, etc,
> ad nausium.
> Just don't feed us a turd and call it a steak if one can't even
> take the trouble to build a working example to test. :/
> If I had some new whiz bang antenna cooked up, I would build
> and test one first, and then talk about it later if it actually was
> proven to work.
> Art goes the other route. He talks a great storm, but nothing is
> ever produced to actually test in the real world.
> As far as I see it, that is no way to live.
> MK

I have built them no problem but I am not going to give them away to
people who arenot interested in them.
It is no problem to me if you don't make one. Listen out for me when
it gets cold on 160 meters. I have a rotatable one about 2 foot square
that will be on the tower but at the moment I am adding to it to make
it an all bander maybe all frequency with two rotators for horizontal
and vertical radiation. But then if you can't hear me then you can't
work me.
By the way large ground planes are not in vogue anymore since they
have lost their uses. No I anm not going to bring it to you so that
you can see the test or operate it so you will have to continue to
call me names as usual
By the way John E Davis works is still in the archives, he has not
removed it for people trying to find it.
Art

1697. Re: coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 21:52:25 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <ukWJi.417$ua4.144@newssvr22.news.prodigy.net>
Source record: 36127

Walter Maxwell wrote:
> Jimmie, will you please translate 'ROTFLMAO' ?

Hey Walt, if you don't want to be an OF, you
need to QSY to the following web page: :-)

http://www.gaarde.org/acronyms/%5C
--
73, Cecil http://www.w5dxp.com

1698. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 22:20:03 UTC
From: nm5k@wt.net
Message-ID: <1190672403.672870.130360@19g2000hsx.googlegroups.com>
Source record: 36128

On Sep 24, 4:52 pm, art <aun...@insightbb.com> wrote:

> > Art goes the other route. He talks a great storm, but nothing is
> > ever produced to actually test in the real world.
> > As far as I see it, that is no way to live.
> > MK
>
> I have built them no problem but I am not going to give them away to
> people who arenot interested in them.

They do make cameras... You can take one to a test range
and post the results.

> It is no problem to me if you don't make one.

Thats good, cuz I prefer full size antennas...

>Listen out for me when
> it gets cold on 160 meters. I have a rotatable one about 2 foot square
> that will be on the tower but at the moment I am adding to it to make
> it an all bander maybe all frequency with two rotators for horizontal
> and vertical radiation. But then if you can't hear me then you can't
> work me.

If you put out a decent signal, I should hear you.
I'll be out in the country using big antennas.
Heck, I already have a full size 160m dipole up there.
I was there Sept 1... I converted my old 80/40 dipoles
to add two more bands. Now I have 160,80,40,20 dipoles
on a single feedline. I eventually plan some type of
vertical for transmitting. Probably a wire running up a
tall tree. And yes, I'll be using a few of those obsolete
old radials to ensure the ground losses don't eat my
lunch.
And as you have probably already noticed, I have plans for
beverages up there. I'll have a big small loop too..
If you operate, and put out any kind of decent signal,
I should be able to hear you with little trouble.

> By the way large ground planes are not in vogue anymore since they
> have lost their uses.

What? Ground loss has finally been done away with?
It's xmas in Sept... :/

>No I anm not going to bring it to you so that
> you can see the test or operate it so you will have to continue to

> call me names as usual

As usual, you are not much help. BTW, I don't really recall calling
you any names. Only your posted "theory"... :/

> By the way John E Davis works is still in the archives, he has not
> removed it for people trying to find it.

I don't need to find it. I was here when it all went down.
As I recall, Richard asked him a few pertinent questions, and
he did a runner..
Myself, I think once he finally got a clue what you were proposing,
he decided to duck and cover his rear.. I know he has not been
back to answer the fairly simple questions posed to him.
BTW, if you do decide to get out on 160m to test this antenna,
please do us all a favor and ensure that the feedline is not doing
the bulk of the radiating.
I'll be going back up there in middle-late Oct when the trees
start turning colorful if you want to try it out.
MK

1699. Re: Beverage Antenna, Noise pickup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 22:22:24 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <81egf35urgt63ddgk8plh4ns298obc7e6o@4ax.com>
Source record: 36129

On Mon, 24 Sep 2007 17:35:58 -0400, Walter Maxwell <walt@w2du.com>
wrote:

>The resistance
>terminating the Beverage that produced the null was around 600 ohms. Because the matching
resistive
>termination rendered the Beverage a traveling-wave antenna with no standing wave, the
signal from JOAK was
>terminated by the input of our receiver, while the signal from KFI was dissipated in the
matched resistance at
>the Tokyo end of the Beverage-no KFI signal reflected toward the receiver.

Hi Walt,

A wonderful example of applied electronics revealing theoretical
issues (e.g. the Z of the Transmission Line built as an antenna).

73's
Richard Clark, KB7QHC

1700. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 22:38:39 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fd9e9s$k83$1@aioe.org>
Source record: 36130

"art" <aun*@insightbb.com> wrote
> By the way John E Davis works is still in the archives,
> he has not removed it for people trying to find it.

A "John E Davis" Google search of this newsgroup shows nothing posted by John E Davis himself -- only a lot of references to his name, mostly by you, and none of that containing any mathematical proof of your beliefs.

Please refer us to the URL(s) for anything that you, he or anyone else ever wrote and posted directly if such will, by mathematics, support your beliefs that only 1-wave antennas have the required "equilibrium" for "efficient" radiation.

This is your golden opportunity. Otherwise...

RF

1701. Re: coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 22:42:58 UTC
From: K <K@spam.net>
Message-ID: <46f83e15$0$17092$4c368faf@roadrunner.com>
Source record: 36131

'ROTFLMAO' = rolling on the floor laughing my ass off !

"Walter Maxwell" <walt@w2du.com> wrote in message
news:fkbgf393eo2kmebpuvfo7tph035rvt77ft@4ax.com...
> On Mon, 24 Sep 2007 14:43:54 -0400, "Jimmie D" <GFENDER@carolina.rr.com>
> wrote:
>
>>
>>"Walter Maxwell" <walt@w2du.com> wrote in message
>>news:tekbf39rqj7qn1eqb8195vglkl6codd1pj@4ax.com...
>>> On Sat, 22 Sep 2007 08:14:58 -0700, art <aunwin@insightbb.com> wrote:
>
>>> Art, I'm curious concerning what kind of mind-enhancing substance you
>>> were
>>> on when you wrote the above post.
>>> As far as I can tell, this post concerns the coaxial dipole. However, I
>>> don't discern any relationship between
>>> your post and the coaxial dipole.
>>>
>>> What does "60 turns on a 2 foot former" have to do with the coaxial
>>> dipole?
>>>
>>> And what is the "barrell" that you can leave on the ground or put on
>>> the
>>> top of the tower for rotation
>>> purposes? Rotation of an 80-meter dipole with a barrell on the top of
>>> the
>>> tower? Art, you have been smoking
>>> too much liquid polyurethane in your Gaussian pipe.
>>>
>>> Walt, W2DU
>>
>>
>>ROTFLMAO
>>
>>Jimmie
>>
> Jimmie, will you please translate 'ROTFLMAO' ? My dimwitted brain can't
> figure out what you mean.
>
> Walt, W2DU

1702. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 23:03:08 UTC
From: nm5k@wt.net
Message-ID: <1190674988.695147.185770@d55g2000hsg.googlegroups.com>
Source record: 36132

On Sep 24, 5:38 pm, "Richard Fry" <r...@adams.net> wrote:
> "art" <a...@insightbb.com> wrote> By the way John E Davis works is still in the archives,
> > he has not removed it for people trying to find it.
>
> --------
>
> A "John E Davis" Google search of this newsgroup shows nothing posted by
> John E Davis himself -- only a lot of references to his name, mostly by you,
> and none of that containing any mathematical proof of your beliefs.
>
> Please refer us to the URL(s) for anything that you, he or anyone else ever
> wrote and posted directly if such will, by mathematics, support your beliefs
> that only 1-wave antennas have the required "equilibrium" for "efficient"
> radiation.
>
> This is your golden opportunity. Otherwise...
>
> RF

This is the thread in question...
http://groups.google.com/group/rec.radio.amateur.antenna/browse_frm/thread/bc88f9b67cf0c88f/86fbdc00f7e7cbcd?lnk=gst&q=John+E+davis&rnum=2#86fbdc00f7e7cbcd
MK

1703. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 23:05:46 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190675146.202993.293660@r29g2000hsg.googlegroups.com>
Source record: 36133

On 24 Sep, 13:23, "Dave" <no...@nowhere.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1190594700.300659.26440@o80g2000hse.googlegroups.com...
>
>
>
>
>
> > On 23 Sep, 16:10, "Dave" <no...@nowhere.com> wrote:
> >> "John Smith" <assemblywiz...@gmail.com> wrote in message
> >
> >>news:fd6okfukb1@news.albasani.net...
> >
> >> > Dave wrote:
> >> > > ...
> >> >> ok... now if you have a LAW that is different than what is put down in
> >> >> the existing maxwell's 4 equations you must be able to write the
> >> >> equations that make your law different than his. if you can't do
> >> >> that,
> >> >> its no better than a bag of hot air. so show your calculations, write
> >> >> a
> >> >> paper, get it published and show the rest of the world that uses those
> >> >> equations and gets perfectly valid results why we are all wrong.
> >
> >> > Who are you to tell him to shut up? Don't you realize you only manage
> >> > to
> >> > make yourself look the idiot?--Well of course not, that is quite
> >> > obvious!
> >
> >> > You think you will tell the rest of us how to conduct ourselves when
> >> > you
> >> > are finished with him?
> >
> >> > Just where in the hell do you come from? And, what the hell makes you
> >> > have any right whatsoever to do so?
> >
> >> > Go away--PLONK!
> >
> >> > JS
> >
> >> go plonk yourself... i am simply challenging someone who has shown
> >> himself
> >> to be full of hot air to properly explain his revolutionary law that has

> >> evaded the rest of the world, and who has been handwaviing and telling
> >> everyone that he has this great new law... but can never explain it in
> >> terms
> >> that anyone understands... just more handwaving and generalizing. if you
> >> can't take a challenge then you don't belong on usenet. and art sure
> >> doesn't need you to defend him, he does well enough to make an ass of
> >> himself.- Hide quoted text -
>
> >> - Show quoted text -
>
> > Bull. A ham who holds a doctorate and works for MIT provided the
> > corroberating details.
> > It is not my fault that your mathematical knoweledge and education
> > could not keep up with him which is the same for all others on the
> > thread. Nobody but nobody could fault his mathematics and you call
> > that just "hand waving"?
> > David it was you who led the charge and consistently stated that you
> > can't apply a time varient to a static field and refused to
> > acknowledge that the math supplied that concurred with Maxwells laws
> > relying only on the fact that it came from your own mouth so it must
> > be correct. Now that I call "handwaving" all mouth and no facts
> > proffered to confirm your opinions or guesstimates. Now you say you
> > should be able to take a "challenge" well I invite any scientifically
> > based challenge some thing I have hoped for in a long while from the
> > self professeed experts and am still waiting.
> > I can understand opinions from hobbiests you have joined the ranks of
> > ham radio but for those skilled in the art and have gone thru the
> > reqimen of getting a degree or obtaining the rights of a professional
> > engineer one would expect a more factual debate on the subject. If you
> > don't understand the subject then you default your right to critisize.
> > Now I have Richard firing his nonsense across my bow with the
> > credentials of a degree in geography that trumps all others in the
> > hope that he can get somebody to talk to him.
> > Have a happy day to all
> > Art Unwin KB9MZ......ex UK.
>
> ah well art... i guess i have riled you up enough this time, its not any fun
> any more though. you don't have anything new to offer, just pointing to old
> discreditted information and posts that don't exist. I have quoted enough
> of my credentials that by now you should know i can follow whatever math you
> may throw up, or puke up as the case may be, on this forum. and i'm not
> going to bother to go search for your mythical patents and papers any more,
> publish the full links here or forever be labeled a faker.- Hide quoted text -
>
> - Show quoted text -

I porefer the faker one

1704. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 23:07:47 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <fdegf3ta0cuhq5hr3u3b20742c9nf90gb8@4ax.com>
Source record: 36134

On Mon, 24 Sep 2007 14:52:19 -0700, art <aunwin@insightbb.com> wrote:

>By the way John E Davis works is still in the archives, he has not
>removed it for people trying to find it.

Hi Arhtur,

Not worth repeating, is it? Such recommendations fall into a familiar pattern, especially when you can't find your own page.

Well, still and all it bears visiting those archives to read how each of your claims blows your last one out of the air as being the height of stupidity.

Efficient directors are longer than driven elements.
("Time to Burn the books, the early tour.")

More efficient reflectors are shorter than the driven element. (Unless you need two reflectors which are even MORE efficient.)

Short antennas are vastly more efficient because halfwaves are too long. (Good by two reflectors.)

Long (halfwave) antennas are exceedingly more efficient because they were blessed by a heretical disciple of Gauss. (Goodbye directors and reflectors altogether.)

Longer (fullwave) antennas are fantastically more efficient because they....
(Goodbye Gauss, here's another spade of mud in your face.)

Well, at least the jokes aren't all the same, but superlatives are getting stretched thin.

Imagine the embarrassment of this mythical Dr. Phil whose name is being pasted to every theory coming out of central Illinois!

OK, so he only dresses like Dr. Phil. Let's see what he actually had to offer and we find that any support (the word Gauss misapplied) for arT has been spun up out of whole cloth.

Arthru has discovered a button of Dr. Phil's, sewed it to a coat, looked in the pocket of the coat and found a paper, on this paper aRt writes his theory and puts it back into the coat to give us a glowing reference of authorship to the grand Dr from MTA!

For discovery of a button a battle was one.

;-) ;-) ;-) Art spoiler, the following is a joke ;-) ;-) ;-)

These theories of "efficiency" are like the Republicans giving us back our own money - meanwhile the prostituted dollar has plummeted, a barrel of oil has nearly tripled in price, the deficit went sky-hi, and Greenspan is spitting on the White House. Soon we will all be as rich (oops, efficient) as sub-Saharan Africans. At least jobs have picked up in this era of efficiency, it is now vastly easier picking fly shit out of sand.

73's
Richard Clark, KB7QHC

1705. Re: Beverage Antenna, Noise pickup

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 23:09:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13fgguker0lc713@corp.supernews.com>
Source record: 36135

NEC-2 and NEC-2 based programs like EZNEC do a good job of modeling Beverage antennas. (The EZNEC demo isn't adequate for this.) The only trick is making the ground connection. In NEC-2 use Sommerfeld ground; in EZNEC it's called Real, High Accuracy ground. At each end of the antenna, create a semi-circle of radials, a few inches above the ground. For wire length, a free-space quarter wavelength is more than adequate -- the only requirement is that the effective resistance should be considerably less than the termination resistance. The semi-circles should be facing away from the antenna, so none of the wires extend under the antenna wire. Ground "connections" are made to the center of the semi-circle. This of course assumes that there are reasonably effective ground connections at both ends of the real antenna.

Roy Lewallen, W7EL

1706. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-24 23:57:16 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <cZidnRzZ26lB02XbnZ2dnUVZ_uuqnZ2d@bright.net>
Source record: 36136

Outstanding Fergus. Though I would change "which" to "that" as the Unknown
is defining the type of language. 73, Mac N8TT

.... and I want nothing to do with the this tar-baby topic. The thing
speaks for itself.

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"fergus" <ferguscapewrath@yahoo.co.uk> wrote in message

>
> "People who know what they are talking about can afford to use
> language which everyone understands" -- Unknown
>
>
>
> --
>
> Fergus

1707. Re: Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 00:05:35 UTC
From: merlin-7 <merlin-7@sc.rr.com>
Message-ID: <46f8514e$0$19617$4c368faf@roadrunner.com>
Source record: 36137

I like lakeviews ...
http://www.hamstick.com/9007.htm

lots of gain with a pattern great for boats. you may need the ground plane
kit but I can tell you, this is a great antenna for the price.
Besides, I have not killed mine yet. It's a brute.. I also get great
reports in areas where a 1/4 wave cannot even (key up the repeater)

Just an idea...

"Bruce in Alaska" <bruceg@btpost.net> wrote in message
news:bruceg-47A436.09085024092007@netnews.worldnet.att.net...
> In article <46f6a883$0$15936$3406c2d1@news.ncia.net>,
> Larry <invalid@invalid.com> wrote:
>
> > Does anyone know of a commercial 2 meter antenna made for boats? Fresh
> > water exclusively, but this would be mounted on a T-top of a center
> > console which is towed, so it would have to be able to be tilted down
> > just like the VHF marine antenna. Thanks.
>
> Morad Electronics in Seattle, Washington makes the 156HD Marine Antenna
> that is used on better than 90% of the High Seas Fishing Fleet that
> fish the North Pacific and Bering Sea. (Deadliest Catch vessels)
>
> Morad also makes a Ham version of the SAME antenna, called the 146HD.
>
> All the Morad Antennas were designed by the legendary Marine
> Communications Engineer Eddie Zanbergen (RIP)
>
> I am not affiliated with Morad Electronics, but have installed and
> used their products for the last 35 years. There isn't a more
> rugged and weather survivable Marine Antenna than those in the
> Morad Product line.
>
> Bruce in alaska (AL7AQ) longtime Marine Radioman,
> and ex-FCC Inspecter
> --
> add a <2> before @

1708. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 00:08:01 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190678881.111901.210180@57g2000hsv.googlegroups.com>
Source record: 36138

On 24 Sep, 16:03, n...@wt.net wrote:
> On Sep 24, 5:38 pm, "Richard Fry" <r...@adams.net> wrote:
>
>
>
>
>
> > "art" <a...@insightbb.com> wrote> By the way John E Davis works is still in the
archives,
> > > he has not removed it for people trying to find it.
>
> > _____
>
> > A "John E Davis" Google search of this newsgroup shows nothing posted by
> > John E Davis himself -- only a lot of references to his name, mostly by you,
> > and none of that containing any mathematical proof of your beliefs.
>
> > Please refer us to the URL(s) for anything that you, he or anyone else ever
> > wrote and posted directly if such will, by mathematics, support your beliefs
> > that only 1-wave antennas have the required "equilibrium" for "efficient"
> > radiation.
>
> > This is your golden opportunity. Otherwise...
>
> > RF
>
> This is the thread in
question...http://groups.google.com/group/rec.radio.amateur.antenna/browse_frm/t...
> MK- Hide quoted text -
>
> - Show quoted text -

I just read that thread all again, even Richards which I have stopped
reading now.
One thing he says comes to mind" the antenna was invented some 100
years ago" but nobody asked where it is illustrated so that they can
see the proof. Rather than pursuing me for data and calling me names
get Richard to show where it is in the antenna books so you can see
the results for your selves. Ofcourse Richard is known for his lies so
I wouldn't hang around to long for his answer because as I stated he
is a liar. He also said he agreed with it all along from some prior
reading but David decided for the moment not to challenge him because
that infered that time can be added to BOTH sides of the equation
which David states one cannot do. O what a web one weaves when they

step down and try to deceiveI But he did get the Doctor to leave in
the same way he has got other experts to leave
purely on the smell of his retorts. I think I will drop out on this
one somebody will surely rake thru all the antenna books of old to
verify Richards fallacioes statments. I am gone for a while to do
things with the antenna before it gets to cold. After reading that
long thread people will never accept that any thing new can come
about
antennas which is why most have departed from that scene and moved to
agitating on newsgroups
Bye Bye, don't know when I will come back so you will have to decide
now who will be the recipient of your arrows and slander from now on.
Art Unwin KB9MZ....ex UK

1709. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 00:09:30 UTC
From: merlin-7 <merlin-7@sc.rr.com>
Message-ID: <46f8523f$0$32540$4c368faf@roadrunner.com>
Source record: 36139

"fergus" <ferguscapewrath@yahoo.co.uk> wrote in message
news:hobgf3h2stvke4l8rq9ssptp0m3gcp1366@4ax.com...
> On Mon, 24 Sep 2007 09:15:35 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
> >Perhaps?
> >
> >"As far as the laws of mathematics refer to reality, they are not
> >certain; as far as they are certain, they do not refer to
> >reality."--Albert Einstein
> >
> >And, I humbly propose:
> >
> >"Too often, the ignorant are quick to conceal their ignorance in
> >complexity not well grasped by common men."--John Smith
>
> "People who know what they are talking about can afford to use
> language which everyone understands" -- Unknown
>
>
>
> --
>
> Fergus

What do you want to know?

Think about it....

1710. TA-33jr smaller element stuck in larger element.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 00:51:54 UTC
From: Anti-PC <aa8x@wowway.com>
Message-ID: <y86dnWuvK7DtxmXbnZ2dnUVZ_oesnZ2d@wideopenwest.com>
Source record: 36040

I have a very old Mosley TA-33 Jr antenna and one element; the smaller tube is stuck in the larger tube. This is the middle tube and only 3 foot long and about 3/4 inches in diameter with about 1 inch sticking out of the larger tube. I have tried pulling then apart with a bumper jack and vice grips but have had no luck. The elements are not bent nor do they have any dents. I suspects oxidation of the elements is the problem. I have also tried using ammonia but no help. Any suggestions on pulling then apart would be greatly appreciated. .
Bob, AA8X

1711. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 01:01:06 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fd9ml7avp1@news.service.uci.edu>
Source record: 36041

John Smith wrote:
> Jim Kelley wrote:
>
> > ...
>
>> Witness the evolution of National Park to Industrial Park.
>>
>> jk
>>

>
> Progress, and over-population, does come at some cost ... :-(
>
> Regards,
> JS

As a CB'er you wouldn't be expected to know this, but the Amateur
Radio Spectrum has been likened to a National Park.

ac6xg

1712. Re: Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 01:19:53 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <ZmZJi.5019$Nn4.3376@trnddc02>
Source record: 36042

"merlin-7" <merlin-7@sc.rr.com> wrote in message
news:46f8514e$0$19617$4c368faf@roadrunner.com...
>I like lakeviews ...
> http://www.hamstick.com/9007.htm
>
> lots of gain with a pattern great for boats. you may need the ground plane
> kit but I can tell you, this is a great antenna for the price.
> Besides, I have not killed mine yet. It's a brute.. I also get great
> reports in areas where a 1/4 wave cannot even (key up the repeater)
>
> Just an idea...

Hi Merlin

Do you have any suggestions about how the manufacture rates the power
handling capability of that hamstick?

Jerry

1713. Re: Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 01:45:42 UTC
From: Larry <invalid@invalid.com>
Message-ID: <46f86840$0$15917$3406c2d1@news.ncia.net>
Source record: 36043

Bruce in Alaska wrote:
> In article <46f6a883$0$15936$3406c2d1@news.ncia.net>,
> Larry <invalid@invalid.com> wrote:
>
>> Does anyone know of a commercial 2 meter antenna made for boats? Fresh
>> water exclusively, but this would be mounted on a T-top of a center
>> console which is towed, so it would have to be able to be tilted down
>> just like the VHF marine antenna. Thanks.
>
> Morad Electronics in Seattle, Washington makes the 156HD Marine Antenna
> that is used on better than 90% of the High Seas Fishing Fleet that
> fish the North Pacific and Bering Sea. (Deadliest Catch vessels)
>
> Morad also makes a Ham version of the SAME antenna, called the 146HD.
>
> All the Morad Antennas were designed by the legendary Marine
> Communications Engineer Eddie Zanbergen (RIP)
>
> I am not affiliated with Morad Electronics, but have installed and
> used their products for the last 35 years. There isn't a more
> rugged and weather survivable Marine Antenna than those in the
> Morad Product line.
>
> Bruce in alaska (AL7AQ) longtime Marine Radioman,
> and ex-FCC Inspecter

Thanks, Bruce, I'll take a look. It sounds perfect.

--

Larry W1HJF
rapp at lmr dot com

1714. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 02:16:12 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46f86f63$0$4985$4c368faf@roadrunner.com>
Source record: 36044

"art" <aunwin@insightbb.com> wrote in message
news:1190564336.204834.191580@g4g2000hsf.googlegroups.com...
> On 23 Sep, 07:29, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
>> "art" <aun...@insightbb.com> wrote in message
>>
>> news:1190486598.922907.215230@22g2000hsm.googlegroups.com...
>>
>>
>>
>>
>>
>> > On 22 Sep, 07:22, "Richard Fry" <r...@adams.net> wrote:
>> >> "art" <aun...@insightbb.com> wrote
>>
>> >> >The most efficient radiator is one wave length long where
>> >> >it is considered to be in equilibrium with a parallel electrical
>> >> >cuircuit.
>> >> >For most efficient radiation both the capacitance and the
>> >> >inductance must act as a energy storage such that when
>> >> >the terminals are shorted the energy is released in a burst
>> >> >such that radiation can begin. ... In the case of a fractional
>> >> >wave length radiator the pendulum type radiation is not
>> >> >available for radiation
>>
>> >> __________
>>
>> >> Note (for one example of many) that in an antenna system consisting of
>> >> a
>> >> 1/2-wave, center-fed dipole driven by a matched, balanced transmission
>> >> line,
>> >> the dipole itself radiates virtually all of the r-f energy present at
>> >> the
>> >> antenna feedpoint.
>>
>> >> The radiation efficiency of a system as in the above example, but
>> >> using a
>> >> full wave dipole is no better than the 1/2-wave version, other things
>> >> equal.
>> >> The full wave version just has a different radiation pattern.
>>
>> >> RF
>>
>> > I don't know what your credentials are for you to make such a
>> > statement but it is a free world after all!

>> > A quad radiator is a wave length radiator with a gain more than a half
>> > wave as one sample.
>> > Computor programing confirmes more radiation from full wave antennas
>> > and mathematics according to Maxwell,s rules substantiate it. I can
>> > understand not believing computor programs but I am very interested in
>> > any mathematical data that would support your stand which is contrary
>> > to the mathematics that I and others support.
>> > What you are stating is that an attena in a series cuircit format
>> > produces the same radiation as a parallel or tank cuircuit. I am more
>> > than eager to read the contrary mathematical proof that is contrary to
>> > the mathematics that I hold true. You may have hit on the true
>> > explaqnation of radiation which Einstein, Planck and many others went
>> > to their grave without solving it
>> > Regards
>> > Art KB9MZ.....XG
>>
>> I dont know his credentials either but Richard is absolutly correct.
>> Efficency is the ability to radiate the signal and not turn it into
>> infra-red energy and has nothing to do with gain.
>>
>> The Math:
>> Efficiency = (power applied to the antenna system - power turned into
>> heat
>> by the antenna system)/power applied to the antenna system.
>>
>> Doesnt take a computer, doesnt take Maxwell or Einstien to explain. 5th
>> grade math works pretty well in this case.
>>
>> The best thing the OP can do for his existing antenna is install a good
>> ground system and impedance matching networks, antenna tuner. If I were
>> really serious about it I would invest in an antenna analyzer so I would
>> know when my antenna is tuned for optimum match to my radio and log the
>> settings of my tuner. With the ground system and antenna type he has I am
>> sure the ground resistance is soaking up most of his signal. He would
>> surely
>> benifit from improving his ground system.
>>
>> Jimmie- Hide quoted text -
>>
>> - Show quoted text -
>
> In comparing two antennas with similar omni direction radiation field
> I state that gain in the field is indicative of increased radiadion
> but that is a side issue brought up as often is in this newsgroup in
> tha absence of a point by point debate.

No that is the point. An antenna can radiate no more energy than you put into it. If you do something to increase the field intensity in one direction the field intensity must decrease in other directions. Nothing to debate, it is a proven fact. A fact you will never accept because if you do

you will also have to accept the your guassian antenna is just a delusion.

It is a real shame that you have chosen a knowledge of antennas to be such an important measuring stick for the value of your existence.

Jimmie

Jimmie

1715. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 02:23:24 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <fi_Ji.64501$Y7.56522@bignews3.bellsouth.net>
Source record: 36045

> And, I humbly propose:
>
> "Too often, the ignorant are quick to conceal their ignorance in
> complexity not well grasped by common men."--John Smith
>
> Regards,
> JS

I represent that remark. my good man.
My ignorance will heretofore never be concealed again.
I can display my ignorance with the best of'em.

1716. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 02:28:00 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46f87226$0$15359$4c368faf@roadrunner.com>
Source record: 36046

>> "People who know what they are talking about can afford to use
>> language which everyone understands" -- Unknown

I m sure this was not meant to apply to those for whom ignorance is a
personal choice.

Jimmie

1717. Re: coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 02:47:30 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46f876b7$0$32502$4c368faf@roadrunner.com>
Source record: 36047

"Walter Maxwell" <walt@w2du.com> wrote in message
news:fkbgf393eo2kmebpuvfo7tph035rvt77ft@4ax.com...
> On Mon, 24 Sep 2007 14:43:54 -0400, "Jimmie D" <GFENDER@carolina.rr.com>
> wrote:
>
>>
>>"Walter Maxwell" <walt@w2du.com> wrote in message
>>news:tekbf39rqj7qn1eqb8195vglkl6codd1pj@4ax.com...
>>> On Sat, 22 Sep 2007 08:14:58 -0700, art <aunwin@insightbb.com> wrote:
>
>>> Art, I'm curious concerning what kind of mind-enhancing substance you
>>> were
>>> on when you wrote the above post.
>>> As far as I can tell, this post concerns the coaxial dipole. However, I
>>> don't discern any relationship between
>>> your post and the coaxial dipole.
>>>
>>> What does "60 turns on a 2 foot former" have to do with the coaxial
>>> dipole?
>>>
>>> And what is the "barrell" that you can leave on the ground or put on
>>> the
>>> top of the tower for rotation
>>> purposes? Rotation of an 80-meter dipole with a barrell on the top of
>>> the
>>> tower? Art, you have been smoking
>>> too much liquid polyurethane in your Gaussian pipe.
>>>
>>> Walt, W2DU
>>
>>
>>ROTFLMAO
>>
>>Jimmie
>>
> Jimmie, will you please translate 'ROTFLMAO' ? My dimwitted brain can't
> figure out what you mean.
>
> Walt, W2DU

Rolling On The Floor Llaughing My Ass Off

I getting over surgery
Im easily entertained when Ive been taking oxycodone(percocet)

1718. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 02:55:52 UTC
From: Mark@TayleorRobesin.org
Message-ID: <f5ugf3126el380ab0og3k72nr590ciafh1@4ax.com>
Source record: 36048
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS
bears repeating

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

1719. Re: coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 02:58:47 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <u8ugf3tdtvqu8rq6q071n4dj9bbtsbuqks@4ax.com>
Source record: 36049

On Mon, 24 Sep 2007 16:52:25 -0500, Cecil Moore <nospam@w5dxp.com> wrote:

>Walter Maxwell wrote:
>> Jimmie, will you please translate 'ROTFLMAO' ?
>
>Hey Walt, if you don't want to be an OF, you
>need to QSY to the following web page: :-)
>
>http://www.gaarde.org/acronyms/%5C

Thanks, Cecil, you just saved me from a fate worse than death. I've added the URL to my favorite list. Thanks
again.

Walt

1720. Re: coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 03:05:02 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <0hugf3lul6devjc0b8d63trio5fmo4bjlq@4ax.com>
Source record: 36050

On Mon, 24 Sep 2007 22:47:30 -0400, "Jimmie D" <GFENDER@carolina.rr.com> wrote:

>
>"Walter Maxwell" <walt@w2du.com> wrote in message
>news:fkbgf393eo2kmebpuvfo7tph035rvt77ft@4ax.com...
>> On Mon, 24 Sep 2007 14:43:54 -0400, "Jimmie D" <GFENDER@carolina.rr.com>
>> wrote:
>>
>>>
>>>"Walter Maxwell" <walt@w2du.com> wrote in message
>>>news:tekbf39rqj7qn1eqb8195vglkl6codd1pj@4ax.com...
>>>> On Sat, 22 Sep 2007 08:14:58 -0700, art <aunwin@insightbb.com> wrote:
>>
>>>> Art, I'm curious concerning what kind of mind-enhancing substance you
>>>> were
>>>> on when you wrote the above post.
>>>> As far as I can tell, this post concerns the coaxial dipole. However, I
>>>> don't discern any relationship between
>>>> your post and the coaxial dipole.
>>>>
>>>> What does "60 turns on a 2 foot former" have to do with the coaxial
>>>> dipole?
>>>>
>>>> And what is the "barrell" that you can leave on the ground or put on
>>>> the
>>>> top of the tower for rotation
>>>> purposes? Rotation of an 80-meter dipole with a barrell on the top of
>>>> the
>>>> tower? Art, you have been smoking
>>>> too much liquid polyurethane in your Gaussian pipe.
>>>>
>>>> Walt, W2DU
>>>
>>>
>>>ROTFLMAO
>>>
>>>Jimmie
>>>
>> Jimmie, will you please translate 'ROTFLMAO' ? My dimwitted brain can't
>> figure out what you mean.
>>
>> Walt, W2DU
>
>Rolling On The Floor Llaughing My Ass Off

>
>I getting over surgery
>Im easily entertained when Ive been taking oxycodone(percocet)
>

Thanks, Jimmie, for the translation. In addition, Cecil directed me to the acronym dictionary, where I also
found it.

Hope your recovery from surgery goes well. I'm still recovering (very slowly) from spinal surgery performed in
April, so I'm well familiar with oxycodone.

Walt

1721. Re: Questions about a 2m J-pole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 04:32:12 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <jb0Ki.178942$zz2.57139@newsfe12.phx>
Source record: 36051

"Tom Corker" <tomcorker@bluebottle.com> wrote in message
news:1190648224.752255.254140@d55g2000hsg.googlegroups.com...
OK, I've built my J-pole and it's looking quite good. In the end, I
went for 22mm copper tubing as I had some spare. I've still not
decided on the coax though. I've measured the run, and I'll be needing
12 meters (39 feet). In addition to the RG213, I've managed to find a
source of 'low-loss mini 8' (RG-8X). The RG213 is £1.40 per meter, and
the RG-8x is £0.65
per meter. Is the RG213 worth the difference on VHF?

Tom,

On VHF FM, a dB or two of signal will affect a marginal contact. In your situation, however, the better cable provides only slightly more than half a dB of signal, hardly worth the extra expense.

I used http://www.ocarc.ca/coax.htm for that comparison.

Other comparison tables and charts are widely available on the Internet with a search for "Coaxial Cable" Loss. The sample table below will line up nicely in a monospace font, like Courier.

Coax Cable Type Signal Loss per 100 ft
Loss* RG-174 RG-58 RG-8X RG-213 RG-6 RG-11 RF-9914 RF-9913
1MHz 1.9dB 0.4dB 0.5dB 0.2dB 0.2dB 0.2dB 0.3dB 0.2dB
10MHz 3.3dB 1.4dB 1.0dB 0.6dB 0.6dB 0.4dB 0.5dB 0.4dB
50MHz 6.6dB 3.3dB 2.5dB 1.6dB 1.4dB 1.0dB 1.1dB 0.9dB
100MHz 8.9dB 4.9dB 3.6dB 2.2dB 2.0dB 1.6dB 1.5dB 1.4dB
200MHz 11.9dB 7.3dB 5.4dB 3.3dB 2.8dB 2.3dB 2.0dB 1.8dB
400MHz 17.3dB 11.2dB 7.9dB 4.8dB 4.3dB 3.5dB 2.9dB 2.6dB
700MHz 26.0dB 16.9dB 11.0dB 6.6dB 5.6dB 4.7dB 3.8dB 3.6dB
900MHz 27.9dB 20.1dB 12.6dB 7.7dB 6.0dB 5.4dB 4.9dB 4.2dB
1GHz 32.0dB 21.5dB 13.5dB 8.3dB 6.1dB 5.6dB 5.3dB 4.5dB
Imped 50ohm 50ohm 50ohm 50ohm 75ohm 75ohm 50ohm 50ohm

1722. Re: TA-33jr smaller element stuck in larger element.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 05:28:55 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <u01Ki.127034$Mu5.86570@newsfe15.phx>
Source record: 36052

"Anti-PC" <aa8x@wowway.com> wrote in message
news:y86dnWuvK7DtxmXbnZ2dnUVZ_oesnZ2d@wideopenwest.com...
> I have a very old Mosley TA-33 Jr antenna and one element; the smaller
tube
> is stuck in the larger tube. This is the middle tube and only 3 foot long
> and about 3/4 inches in diameter with about 1 inch sticking out of the
> larger tube. I have tried pulling then apart with a bumper jack and vice
> grips but have had no luck. The elements are not bent nor do they have any
> dents. I suspects oxidation of the elements is the problem. I have also
> tried using ammonia but no help. Any suggestions on pulling then apart
would
> be greatly appreciated. .
> Bob, AA8X

If it's oxidation, try heat. Heat gun, torch, etc. A small amount of differential movement (the outer tube will heat up first/more) may break up the oxidation.

An alternate mechanical means might involve finding or fashioning a cylindrical collar (a scrap of PVC pipe, perhaps) whose inner diameter allows it to slide over the one-inch protrusion of the smaller tube but not over the larger tube. It must be long enough that the inner tube does NOT protrude from it.

With the collar in place and secured with a piece of tape, turn the stuck elements vertical, collar down, and drop them on a cement surface. When the collar hits the cement, the outer element will surely stop, while the inner element _may_ continue downward a bit due to its inertia. (Have you ever held a catsup bottle and smacked the edge of your hand against the other hand? Maybe some catsup flies out. Same principle.)

I have used variations of this method to release stuck telescoping mast sections -- especially useful if the mast was tweaked by dropping.

1723. Re: TA-33jr smaller element stuck in larger element.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 10:51:52 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <xuWdndZU3rdPemXbRVnytAA@pipex.net>
Source record: 36053

> I have a very old Mosley TA-33 Jr antenna and one element; the smaller tube
> is stuck in the larger tube. This is the middle tube and only 3 foot long
> and about 3/4 inches in diameter with about 1 inch sticking out of the
> larger tube. I have tried pulling then apart with a bumper jack and vice
> grips but have had no luck. The elements are not bent nor do they have any
> dents. I suspects oxidation of the elements is the problem. I have also
> tried using ammonia but no help. Any suggestions on pulling then apart would
> be greatly appreciated. .
> Bob, AA8X
==========
Although I have never needed to do it myself and risking some negative
comments , may I suggest you explore the following :

Flow water through the inner tube and heat the outer tube (localy) with
a flame torch , in the hope the inner tube diameter remains roughly the
same ,whereas the outer tube will expand such that you MIGHT be able to
pull the tubes apart.

Frank GM0CSZ / KN6WH

1724. Re: coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 11:27:21 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1190719641.547732.287740@50g2000hsm.googlegroups.com>
Source record: 36054

Well, I just put up a 'coaxial' dipole, but I'm easily confused...
I got the diagram out and laid it on the floor and then some coax, and some insulators, and some wire, and my big ol soldering iron
(about a 1000 watts used for soldering copper pipes back in my auto company days)
And then I went to wrestlin with the devil...
After the solder smoke and fumes cleared and my eyes quit waterin, I Looked around and lo to behold it was a dipole...
But the durned coax was runnin from the center to the rig and the wire wuz runnin from one end insulator to tother one... Didn't look nothin like the diagram... Well, I'm not one to go against the current so I decided to put it up anyways just for fun...
So, I gets it up and I goes and checks the swear thing they all talk about...
Seems there is a problem...
First I sets the swear meter to forward and adjust the knobby thing so it reads full scale...
Then I tries the reflected setting and that's when the problem begins...
The needle deflects all the way to zero and when I looks at the funny looking Bird chart with the kinda diagonal lines running up and down, that says my swear ratio is 10 to 1... Looks like this < 1.0:1 > on the chart.... Guess the printer made a typo...
Well, I decided to see if I could hook up with anyone before I pulled it back down... There wuz this fella with a funny call sign, 3B7C answered me... Now I need an dipole that will let me talk to Frank over in Franklin County, so this coaxial dipole just ain't doing the job at all...
Guess I gotta start all over agin...

denny / k8do

1725. Re: Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 12:12:50 UTC
From: Nate Bargmann <n0nb.DO.NOT.SPAM@ME.networksplus.net>
Message-ID: <pan.2007.09.25.12.12.50@ME.networksplus.net>
Source record: 36055

I'm not sure if this is what you're looking for, NEC ported to C:

http://5b4az.chronos.org.uk/pages/nec2.html

73, de Nate >>

--

"The optimist proclaims that we live in the best of all possible worlds,
the pessimist fears this is true."

1726. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 13:46:13 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fdb3f5mos1@f04n12.cac.psu.edu>
Source record: 36056

Jim Kelley wrote:
>
>
> John Smith wrote:
>> Jim Kelley wrote:
>>
>> > ...
>>
>>> Witness the evolution of National Park to Industrial Park.
>>>
>>> jk
>>>
>
>>
>> Progress, and over-population, does come at some cost ... :-(
>>
>> Regards,
>> JS
>
> As a CB'er you wouldn't be expected to know this, but the Amateur Radio
> Spectrum has been likened to a National Park.

Which reminds me, we were down to Assateague National Park a week ago.
You know the one with all the horses? And like all national parks some
of the critters leave their scat all over the place.......

Any correlation?

- 73 de Mike KB3EIA -

1727. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 13:58:55 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fdb46vmou1@f04n12.cac.psu.edu>
Source record: 36057

nm5k@wt.net wrote:

> Just don't feed us a turd and call it a steak if one can't even
> take the trouble to build a working example to test. :/

Although there appears to be a good attempt to polish this particular one. ;^)

> If I had some new whiz bang antenna cooked up, I would build
> and test one first, and then talk about it later if it actually was
> proven to work.

Absolutely. Build and test. Get on the air and work. Put one up on a range and produce some numbers. Publish the numbers. Silence the skeptics. Convert them.

I always kind of wondered about the accusations thrown about here. If they are true, there there appears to be a sizable group of Hams (and apparently EE's and physicists too) who want to be using antennas that don't work very well. They want to use inferior antennas so badly that they squash any attempts at advancing the technology by others.

Yeah, right!

If I could put out a better signal by sticking a wire in a bagel , I'd be doing it in a minute. 8^)

- 73 de Mike KB3EIA -

1728. Re: KB9RQZ posts his bio

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 14:44:32 UTC
From: Gavrielah Hojnacki <gav@he-she.com>
Message-ID: <46f912dc$0$26384$88260bb3@free.teranews.com>
Source record: 36058
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna,soc.men,alt.usenet.kooks

1) I was draft into the US Army.
2) I is a member of the Chemcal Cops
3) The military wont let me retire.
4) I dosn't serve under the name 'Mark Morgan but that's okay cuz theFBI,
DOD, and CIA have al todl me I candodit.
5) I is on-the-lam from stalking former marines and fatal
atraction four ex-shemale wife almoney
6) I was recenty, paying $5/hr. to acess my ISP
7) I has a 248 IQ, but cant figre out how touse a spel checker.
8) I is a bi-sexual Pagan male ham who like to be spanked.
9) I can't find any action on the military base in Central IL, so I hav to
ask the peple on th USNET.
http://www.marksspamblog.blogspot.com/
10) I punce gotcha

<Mark@TayleorRobesin.org> wrote in message
news:f5ugf3126el380ab0og3k72nr590ciafh1@4ax.com...
> bears repeating
>
>
INDEED!

--
Posted via a free Usenet account from http://www.teranews.com

1729. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 14:53:14 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fdb7crmbg1@news.albasani.net>
Source record: 36059

Hal Rosser wrote:

> ...
> I represent that remark. my good man.
> My ignorance will heretofore never be concealed again.
> I can display my ignorance with the best of'em.
>
>

Hal:

Interesting, I agree!

We are all ignorant on some points, it is mankinds' lot. The wiser will attempt to gain understanding to cure this "disorder."

The "terminally ignorant" will maintain their status ...

Regards,
JS

1730. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 14:56:51 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fdb7jkmbg2@news.albasani.net>
Source record: 36060

Jim Kelley wrote:

> ...
> As a CB'er you wouldn't be expected to know this, but the Amateur Radio
> Spectrum has been likened to a National Park.
>
> ac6xg
>

Ten-fer good buddie!

Catch 'yas on the flip-flop! :-)

Regards,
JS

1731. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 15:18:55 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46f929ba$0$26339$4c368faf@roadrunner.com>
Source record: 36062

"Michael Coslo" <mjc5@psu.edu> wrote in message
news:fdb46vmou1@f04n12.cac.psu.edu...
> nm5k@wt.net wrote:
>
>> Just don't feed us a turd and call it a steak if one can't even
>> take the trouble to build a working example to test. :/
>
> Although there appears to be a good attempt to polish this particular one.
> ;^)
>
>
>> If I had some new whiz bang antenna cooked up, I would build
>> and test one first, and then talk about it later if it actually was
>> proven to work.
>
>
> Absolutely. Build and test. Get on the air and work. Put one up on a range
> and produce some numbers. Publish the numbers. Silence the skeptics.
> Convert them.
>
>
> I always kind of wondered about the accusations thrown about here. If they
> are true, there there appears to be a sizable group of Hams (and
> apparently EE's and physicists too) who want to be using antennas that
> don't work very well. They want to use inferior antennas so badly that
> they squash any attempts at advancing the technology by others.
>
> Yeah, right!
>
> If I could put out a better signal by sticking a wire in a bagel , I'd be
> doing it in a minute. 8^)
>
> - 73 de Mike KB3EIA -

I really think Arts game is to try to get someone else to do his work for
him. If not that he is suffering from delusions of granduer. Sad thing is I
have heard Arts story before in another time and place. I knew a guy that
was truly a mechanical genius but wasted it repairing bank tabulating
equipment back in the 60s & 70s when everything was mechanical. When he
retired after everything was taken over by computers he got interested in
Ham Radio, particularly interested in antennas. Many of the mistakes he made
are the same as Arts. The same mistake about efficiency.

Jimmie

1732. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 15:22:59 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fdb94q$1jf8$1@f04n12.cac.psu.edu>
Source record: 36061

Richard Clark wrote:
> On Mon, 24 Sep 2007 14:52:19 -0700, art <aunwin@insightbb.com> wrote:
>
>> By the way John E Davis works is still in the archives, he has not
>> removed it for people trying to find it.
>
> Hi Arhtur,

I liked Arthru better.....hehe. Dunno why, but it reminds me of Carrie's Father on King of Queens.

> Not worth repeating, is it? Such recommendations fall into a familiar
> pattern, especially when you can't find your own page.
>
> Well, still and all it bears visiting those archives to read how each
> of your claims blows your last one out of the air as being the height
> of stupidity.
>
> Efficient directors are longer than driven elements.
> ("Time to Burn the books, the early tour.")
>
> More efficient reflectors are shorter than the driven element. (Unless
> you need two reflectors which are even MORE efficient.)
>
> Short antennas are vastly more efficient because halfwaves are too
> long. (Good by two reflectors.)
>
> Long (halfwave) antennas are exceedingly more efficient because they
> were blessed by a heretical disciple of Gauss. (Goodbye directors and
> reflectors altogether.)
>
> Longer (fullwave) antennas are fantastically more efficient because
> they....
> (Goodbye Gauss, here's another spade of mud in your face.)

Finally I understand.

>
> These theories of "efficiency" are like the Republicans giving us back
> our own money - meanwhile the prostituted dollar has plummeted,

I was told that is a good thing.

1733. Double ended Yagi???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 15:31:16 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46f929ba$1$26339$4c368faf@roadrunner.com>
Source record: 36063

A few years ago I was visting with friends down in FL. We had traveled all over the state seeing a lot of sights and fishing. While we were fishing off of a long bridge a couple of hams came out and set up equipment on each end of the bridge. They had installed a matched pair of yagis, one on each end, and was trying to determine the minimum signal it took to span the bridge(a 1/2 mile more or less). The antennas were fastened to a rail that extended the full length of the bridge so the first thing that popped into my mind wa what if the rail was the boom for one long yagi with a driven element and reflector at each end and the rest of the space between populated with directors. Would anyone care to model this.

Jimmie

1734. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 15:55:28 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fdbb1g$5rs$1@news.albasani.net>
Source record: 36064

Jimmie D wrote:

> ...
> I really think Arts game is to try to get someone else to do his work for
> him. If not that he is suffering from delusions of granduer. Sad thing is I
> have heard Arts story before in another time and place. I knew a guy that
> was truly a mechanical genius but wasted it repairing bank tabulating
> equipment back in the 60s & 70s when everything was mechanical. When he
> retired after everything was taken over by computers he got interested in
> Ham Radio, particularly interested in antennas. Many of the mistakes he made
> are the same as Arts. The same mistake about efficiency.
>
> Jimmie

Jimmie:

Actually, you make a good point. But, I think we are all guilty of it;
or at least I am, I tend to try to focus attention on my personal
antenna endeavors/experiments/needs.

Not everyone needs a perfect, small, highly efficient, stealthy antenna
... but then, not every needs a stacked pair of 5 element yagi-udas'.

And, mistakes? I am looking forward to the day I have made 'em
all--maybe then I will get relief from having 'em pointed out to me! ;-)

Regards,
JS

1735. get kelp

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 16:16:57 UTC
From: Mark@k4yzRobesin.org
Message-ID: <f3dif358rv5m3oe5iia6t4k795qvcusc0h@4ax.com>
Source record: 36065
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna,soc.men,alt.usenet.kooks

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

1736. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 16:28:54 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <aHaKi.51853$Um6.36565@newssvr12.news.prodigy.net>
Source record: 36066

John Smith wrote:
> And, mistakes? I am looking forward to the day I have made 'em
> all--maybe then I will get relief from having 'em pointed out to me! ;-)

You do realize that when you succeed in becoming an
all-knowing guru, you will have condemned yourself
to a state of arrested development, incapable of
acquiring new knowledge, thus instantly ignorant? :-)
--
73, Cecil http://www.w5dxp.com

1737. Re: Double ended Yagi???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 16:56:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7efif3hv4ukdga2uh3dumafv0j29ptckss@4ax.com>
Source record: 36067

On Tue, 25 Sep 2007 11:31:16 -0400, "Jimmie D"
<GFENDER@carolina.rr.com> wrote:

>Would anyone care to model this.

;-)

1738. Re: KB9RQZ posts his bio

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 17:05:37 UTC
From: KB9RQZ <kb9rqz@punce.com>
Message-ID: <46f933ee$0$26505$88260bb3@free.teranews.com>
Source record: 36068
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna,soc.men,alt.usenet.kooks

"Gavrielah Hojnacki" <gav@he-she.com> wrote in message
news:46f912dc$0$26384$88260bb3@free.teranews.com...
> 1) I was draft into the US Army.
> 2) I is a member of the Chemcal Cops
> 3) The military wont let me retire.
> 4) I dosn't serve under the name 'Mark Morgan but that's okay cuz theFBI,
> DOD, and CIA have al todl me I candodit.
> 5) I is on-the-lam from stalking former marines and fatal
> atraction four ex-shemale wife almoney
> 6) I was recenty, paying $5/hr. to acess my ISP
> 7) I has a 248 IQ, but cant figre out how touse a spel checker.
> 8) I is a bi-sexual Pagan male ham who like to be spanked.
> 9) I can't find any action on the military base in Central IL, so I hav to
> ask the peple on th USNET.
> http://www.marksspamblog.blogspot.com/
> 10) I punce gotcha
>
>
> <Mark@TayleorRobesin.org> wrote in message
> news:f5ugf3126el380ab0og3k72nr590ciafh1@4ax.com...
>> bears repeating
>>
>>
> INDEED!
>
>
>

you have been fooled and hoodwinked into to follow the trail breadcrumbs of
a gruop of vile net stalkers I welcome to this site recovered largely as
result of that rotteneighboor.com posting just gott this sit back uner my
control you will soon find find link two my other blog that explore bisexal
ham radio and the peoples in it.

http://ipunce.blogspot.com/index.html

Shalom

Shalom

--
Posted via a free Usenet account from http://www.teranews.com

1739. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 17:06:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <jnfif3dv0ffpn82029hmifru6ihn2lph13@4ax.com>
Source record: 36069

On Tue, 25 Sep 2007 08:55:28 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>And, mistakes? I am looking forward to the day I have made 'em all

It has been observed (and is a motto of mine)
"If you aren't making any mistakes;
then you aren't trying hard enough."

Unfortunately, when all you do is make the same mistake over and over,
then you aren't trying anything at all.

73's
Richard Clark, KB7QHC

1740. get kelp

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 17:26:02 UTC
From: Mark@k4yzRobesin.org
Message-ID: <q4hif3dpgf850tddriq9clt7761upirrv6@4ax.com>
Source record: 36070
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna,soc.men,alt.usenet.kooks

On Tue, 25 Sep 2007 13:05:37 -0400, "KB9RQZ" <kb9rqz
fake

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

1741. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 17:31:30 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fdbglj$kr6$1@news.albasani.net>
Source record: 36071

Cecil Moore wrote:

> ...
> You do realize that when you succeed in becoming an
> all-knowing guru, you will have condemned yourself
> to a state of arrested development, incapable of
> acquiring new knowledge, thus instantly ignorant? :-)

Been there! Done that!

Starting over ... ;-)

Regards,
JS

1742. Re: TA-33jr smaller element stuck in larger element.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 17:37:12 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46f9473e$0$26405$4c368faf@roadrunner.com>
Source record: 36072

"Highland Ham" <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in message
news:xuWdndZU3rdPemXbRVnytAA@pipex.net...
>
>> I have a very old Mosley TA-33 Jr antenna and one element; the smaller
>> tube is stuck in the larger tube. This is the middle tube and only 3 foot
>> long and about 3/4 inches in diameter with about 1 inch sticking out of
>> the larger tube. I have tried pulling then apart with a bumper jack and
>> vice grips but have had no luck. The elements are not bent nor do they
>> have any dents. I suspects oxidation of the elements is the problem. I
>> have also tried using ammonia but no help. Any suggestions on pulling
>> then apart would be greatly appreciated. .
>> Bob, AA8X
> ==========
> Although I have never needed to do it myself and risking some negative
> comments , may I suggest you explore the following :
>
> Flow water through the inner tube and heat the outer tube (localy) with a
> flame torch , in the hope the inner tube diameter remains roughly the same
> ,whereas the outer tube will expand such that you MIGHT be able to pull
> the tubes apart.
>
>
> Frank GM0CSZ / KN6WH

Marvel Mystery Oil

Jimmie

1743. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 18:05:23 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46f94dd9$0$15417$4c368faf@roadrunner.com>
Source record: 36073

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:jnfif3dv0ffpn82029hmifru6ihn2lph13@4ax.com...
> On Tue, 25 Sep 2007 08:55:28 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>And, mistakes? I am looking forward to the day I have made 'em all
>
> It has been observed (and is a motto of mine)
> "If you aren't making any mistakes;
> then you aren't trying hard enough."
>
> Unfortunately, when all you do is make the same mistake over and over,
> then you aren't trying anything at all.
>
> 73's
> Richard Clark, KB7QHC

I notice this a lot at work

Jimmie

1744. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 18:22:21 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <xlcKi.671$4V6.246@newssvr14.news.prodigy.net>
Source record: 36074

Richard Clark wrote:
> Unfortunately, when all you do is make the same mistake over and over,
> then you aren't trying anything at all.

One wonders why you have never corrected your
"reflections brighter than the surface of the sun"
assertion.
--
73, Cecil http://www.w5dxp.com

1745. Re: Maxwells laws

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 19:11:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fdbmhl$o4b$1@news.albasani.net>
Source record: 36075

Richard Clark wrote:

> ...
> Unfortunately, when all you do is make the same mistake over and over,
> then you aren't trying anything at all.
>
> 73's
> Richard Clark, KB7QHC

Somewhat akin to the repetitious building of the same antenna, over, and over, and over again--huh?

Regards,
JS

1746. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 20:57:24 UTC
From: "John, N9JG" <john@Xremove.MeYgotwals.com>
Message-ID: <UCeKi.38710$G23.17418@newsreading01.news.tds.net>
Source record: 36076

I am sorry to read this. I had hoped I had stumbled upon a perpetual motion machine.

"Jimmie D" <GFENDER@carolina.rr.com> wrote in message news:46f86f63$0$4985$4c368faf@roadrunner.com...
[snip]
>
> No that is the point. An antenna can radiate no more energy than you put
> into it. If you do something to increase the field intensity in one
> direction the field intensity must decrease in other directions. Nothing
> to debate, it is a proven fact. A fact you will never accept because if
> you do you will also have to accept the your guassian antenna is just a
> delusion.
>
> It is a real shame that you have chosen a knowledge of antennas to be such
> an important measuring stick for the value of your existence.
>

1747. Re: TA-33jr smaller element stuck in larger element.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 21:43:42 UTC
From: Nate Bargmann <n0nb.DO.NOT.SPAM@ME.networksplus.net>
Message-ID: <pan.2007.09.25.21.43.43@ME.networksplus.net>
Source record: 36077

On Tue, 25 Sep 2007 13:37:12 -0400, Jimmie D wrote:

> Marvel Mystery Oil

Along the same lines, I can suggest PB Blaster. It is a deep penetrant
that works well.

73, de Nate >>

--

"The optimist proclaims that we live in the best of all possible worlds,
the pessimist fears this is true."

1748. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 21:53:07 UTC
From: Nate Bargmann <n0nb.DO.NOT.SPAM@ME.networksplus.net>
Message-ID: <pan.2007.09.25.21.53.07@ME.networksplus.net>
Source record: 36078

On Sun, 23 Sep 2007 12:59:49 -0500, Richard Fry wrote:

> "Rick wrote>
>>
>> ... What say you all?
>
> Read "Ground Systems as a Factor in Antenna Efficiency" by Brown, Lewis
> & Epstein of RCA Labs, published in the June, 1937 issue of The
> Proceedings of the I.R.E.
>
> It proves otherwise.

Honest question, does it matter whether the objective is a strong ground wave as in AM broadcast or skywave as in amateur operation?

I am installing a Hustler 4BTV this fall and have put down (so far) 16 radials that range from about 18 to 35 feet in length due to my servere space restrictions. I may add 16 more later this fall as an experiment.

73, de Nate >>

--

"The optimist proclaims that we live in the best of all possible worlds, the pessimist fears this is true."

1749. Re: Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 22:19:13 UTC
From: merlin-7 <merlin-7@sc.rr.com>
Message-ID: <46f989e6$0$17148$4c368faf@roadrunner.com>
Source record: 36079

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:ZmZJi.5019$Nn4.3376@trnddc02...
>
> "merlin-7" <merlin-7@sc.rr.com> wrote in message
> news:46f8514e$0$19617$4c368faf@roadrunner.com...
> >I like lakeviews ...
> > http://www.hamstick.com/9007.htm
> >
> > lots of gain with a pattern great for boats. you may need the ground
plane
> > kit but I can tell you, this is a great antenna for the price.
> > Besides, I have not killed mine yet. It's a brute.. I also get great
> > reports in areas where a 1/4 wave cannot even (key up the repeater)
> >
> > Just an idea...
>
>
> Hi Merlin
>
> Do you have any suggestions about how the manufacture rates the power
> handling capability of that hamstick?
>
> Jerry
>
I do not, sorry ..
I only pump 65 watts into mine but from looking at the way it's made, I bet
it could take 1,500 watts.
However, I do not think that I would like 1,500 watts output That close to
me...

It is a 7 foot antenna, stacked 5/8-5/8-1/4, I think. I do know that it
puts out a really flat pattern (I do not chat much on 2 meters with
airplanes)

1750. Re: Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 22:35:36 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <Y2gKi.3074$9r4.315@trnddc04>
Source record: 36080

"merlin-7" <merlin-7@sc.rr.com> wrote in message
news:46f989e6$0$17148$4c368faf@roadrunner.com...
>
> "Jerry Martes" <j.jmartes@verizon.net> wrote in message
> news:ZmZJi.5019$Nn4.3376@trnddc02...
>>
>> "merlin-7" <merlin-7@sc.rr.com> wrote in message
>> news:46f8514e$0$19617$4c368faf@roadrunner.com...
>> >I like lakeviews ...
>> > http://www.hamstick.com/9007.htm
>> >
>> > lots of gain with a pattern great for boats. you may need the ground
> plane
>> > kit but I can tell you, this is a great antenna for the price.
>> > Besides, I have not killed mine yet. It's a brute.. I also get great
>> > reports in areas where a 1/4 wave cannot even (key up the repeater)
>> >
>> > Just an idea...
>>
>>
>> Hi Merlin
>>
>> Do you have any suggestions about how the manufacture rates the power
>> handling capability of that hamstick?
>>
>> Jerry
>>
> I do not, sorry ..
> I only pump 65 watts into mine but from looking at the way it's made, I
> bet
> it could take 1,500 watts.
> However, I do not think that I would like 1,500 watts output That close to
> me...
>
> It is a 7 foot antenna, stacked 5/8-5/8-1/4, I think. I do know that it
> puts out a really flat pattern (I do not chat much on 2 meters with
> airplanes)

Hi Merlin

I was actually curious about the meaning of the "DC" they use to define
the power rating of the 2 meter hamstick.

Jerry

1751. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 22:50:48 UTC
From: nm5k@wt.net
Message-ID: <1190760648.752778.265170@57g2000hsv.googlegroups.com>
Source record: 36081

On Sep 25, 4:53 pm, Nate Bargmann
<n0nb.DO.NOT.S...@ME.networksplus.net> wrote:
> On Sun, 23 Sep 2007 12:59:49 -0500, Richard Fry wrote:
> > "Rick wrote>
>
> >> ... What say you all?
>
> > Read "Ground Systems as a Factor in Antenna Efficiency" by Brown, Lewis
> > & Epstein of RCA Labs, published in the June, 1937 issue of The
> > Proceedings of the I.R.E.
>
> > It proves otherwise.
>
> Honest question, does it matter whether the objective is a strong ground
> wave as in AM broadcast or skywave as in amateur operation?

No, the local ground losses effect the efficiency the same no matter
what skip type,
angles used , etc..
It will be equally weaker in all directions and angles if you add more
ground loss.
The pattern will still be the same in all directions, as all angles
suffer equally.
Same pattern, just less field strength if you add more ground loss.
MK

1752. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 23:01:55 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fdc41h$p8p$1@aioe.org>
Source record: 36082

"Nate Bargmann" wrote
> Honest question, does it matter whether the objective is a
> strong ground wave as in AM broadcast or skywave as in
> amateur operation?

Hi, Nate -

The skywave is important not only to amateur operators, but even more so to the nighttime coverage of stations designated by the FCC as Class A AM broadcast stations (the former "clear channel" stations).

However a poor r-f ground system for a vertical monopole radiator will reduce the radiated field at ALL elevation angles including those producing a useful skywave-- not just in the horizontal plane producing the ground wave.

RF http://rfry.org

1753. Re: TA-33jr smaller element stuck in larger element.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 23:12:42 UTC
From: Anti-PC <aa8x@wowway.com>
Message-ID: <kNudnZ3Gu5h5CGTbnZ2dnUVZ_vShnZ2d@wideopenwest.com>
Source record: 36083

Thank you for all the suggestions. I will try some of your ideas this
weekend.
Bob, AA8X

>

1754. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-25 23:13:02 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fdc4lvhsg1@news.albasani.net>
Source record: 36084

John, N9JG wrote:
> I am sorry to read this. I had hoped I had stumbled upon a perpetual motion
> machine.
>

Keep the faith baby! You just might have, here:

http://www.dailymail.co.uk/pages/live/articles/technology/technology.html?in_article_id=481996&in_page_id=1965

Regards,
JS

1755. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 00:34:22 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1190766862.070971.189670@50g2000hsm.googlegroups.com>
Source record: 36085

On Sep 24, 7:16 pm, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1190564336.204834.191580@g4g2000hsf.googlegroups.com...
>
> > On 23 Sep, 07:29, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
> >> "art" <aun...@insightbb.com> wrote in message
>
> >>news:1190486598.922907.215230@22g2000hsm.googlegroups.com...
>
> >> > On 22 Sep, 07:22, "Richard Fry" <r...@adams.net> wrote:
> >> >> "art" <aun...@insightbb.com> wrote
>
> >> >> >The most efficient radiator is one wave length long where
> >> >> >it is considered to be in equilibrium with a parallel electrical
> >> >> >cuircuit.
> >> >> >For most efficient radiation both the capacitance and the
> >> >> >inductance must act as a energy storage such that when
> >> >> >the terminals are shorted the energy is released in a burst
> >> >> >such that radiation can begin. ... In the case of a fractional
> >> >> >wave length radiator the pendulum type radiation is not
> >> >> >available for radiation
>
> >> >> __________
>
> >> >> Note (for one example of many) that in an antenna system consisting of
> >> >> a
> >> >> 1/2-wave, center-fed dipole driven by a matched, balanced transmission
> >> >> line,
> >> >> the dipole itself radiates virtually all of the r-f energy present at
> >> >> the
> >> >> antenna feedpoint.
>
> >> >> The radiation efficiency of a system as in the above example, but
> >> >> using a
> >> >> full wave dipole is no better than the 1/2-wave version, other things
> >> >> equal.
> >> >> The full wave version just has a different radiation pattern.
>
> >> >> RF
>
> >> > I don't know what your credentials are for you to make such a
> >> > statement but it is a free world after all!
> >> > A quad radiator is a wave length radiator with a gain more than a half

> >> > wave as one sample.
> >> > Computor programing confirmes more radiation from full wave antennas
> >> > and mathematics according to Maxwell,s rules substantiate it. I can
> >> > understand not believing computor programs but I am very interested in
> >> > any mathematical data that would support your stand which is contrary
> >> > to the mathematics that I and others support.
> >> > What you are stating is that an attena in a series cuircit format
> >> > produces the same radiation as a parallel or tank cuircuit. I am more
> >> > than eager to read the contrary mathematical proof that is contrary to
> >> > the mathematics that I hold true. You may have hit on the true
> >> > explaqnation of radiation which Einstein, Planck and many others went
> >> > to their grave without solving it
> >> > Regards
> >> > Art KB9MZ.....XG
>
> >> I dont know his credentials either but Richard is absolutly correct.
> >> Efficency is the ability to radiate the signal and not turn it into
> >> infra-red energy and has nothing to do with gain.
>
> >> The Math:
> >> Efficiency = (power applied to the antenna system - power turned into
> >> heat
> >> by the antenna system)/power applied to the antenna system.
>
> >> Doesnt take a computer, doesnt take Maxwell or Einstien to explain. 5th
> >> grade math works pretty well in this case.
>
> >> The best thing the OP can do for his existing antenna is install a good
> >> ground system and impedance matching networks, antenna tuner. If I were
> >> really serious about it I would invest in an antenna analyzer so I would
> >> know when my antenna is tuned for optimum match to my radio and log the
> >> settings of my tuner. With the ground system and antenna type he has I am
> >> sure the ground resistance is soaking up most of his signal. He would
> >> surely
> >> benifit from improving his ground system.
>
> >> Jimmie- Hide quoted text -
>
> >> - Show quoted text -
>
> > In comparing two antennas with similar omni direction radiation field
> > I state that gain in the field is indicative of increased radiadion
> > but that is a side issue brought up as often is in this newsgroup in
> > tha absence of a point by point debate.
>
> No that is the point. An antenna can radiate no more energy than you put
> into it. If you do something to increase the field intensity in one
> direction the field intensity must decrease in other directions. Nothing to
> debate, it is a proven fact. A fact you will never accept because if you do
> you will also have to accept the your guassian antenna is just a delusion.

If you look at the field of a antenna that isr radiating an equal
amount in all direction
the volume of the radiation consists of usefull energy in the form of
radiation.
If another antenna with the same energy input provides a radiation
field in all
directions that is equal but at a larger radius than the prior antenna
field the the latter antenna has gain
over the prior antenna.
If you compare any fractional ground mounted antenna with a full wave
antenna the radius of the field
willhave a difference of aprox 3 db and the resistive impedance will
have a ratio of two to one.Note that gain is a measure of one radiator
level against another and is no way a distorted field of radiation
that has been manipulated by an additional near by radiator.
A ground plane does nothing more than balancing the circuit provided
such that current does not meander back thru the feed line and a
ground plane is only necessary for a fractional wavelength circuit to
balance the circuit as a whole. It eats up energy that would normally
provide radiation in a circuit such as a full wave radiator. Without a
good ground plane the impedance to a fractional wave length is
difficult and usually not efficient and a lot less than that of a
radiator that does have a good ground plane which is around30 ohms
resistive which is 1/2 of the resistive impedance of a full wave
radiator.
As far as the Gaussian antenna it is not an illusion to those with an
engineering background.
For those without an engineering background to enable them to follow
the logic do not have
the know how to discredit anything and certainly can not measure the
quality of life of those
with understanding.
If you cannot follow the science of antennas then you are doomed to
be a follower, never a leader.
and certainly not a judge.
I'm gone for a month or so and will not be using this newsgroup during
that time.
Will be back in the fall

Art

>
> It is a real shame that you have chosen a knowledge of antennas to be such
> an important measuring stick for the value of your existence.
>
> Jimmie
>
> Jimmie

1756. Re: TA-33jr smaller element stuck in larger element.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 00:59:42 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46f9aeee$0$19646$4c368faf@roadrunner.com>
Source record: 36086

"Anti-PC" <aa8x@wowway.com> wrote in message
news:kNudnZ3Gu5h5CGTbnZ2dnUVZ_vShnZ2d@wideopenwest.com...
> Thank you for all the suggestions. I will try some of your ideas this
> weekend.
> Bob, AA8X
>
>>
>
>

If you use some of the penetrating oils makes sure you give them time to
work.
letting it set a couple of days is not a bad idea.

Jimmie

1757. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 01:03:27 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46f9afd5$0$9629$4c368faf@roadrunner.com>
Source record: 36087

"art" <aunwin@insightbb.com> wrote in message
news:1190766862.070971.189670@50g2000hsm.googlegroups.com...
> On Sep 24, 7:16 pm, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
>> "art" <aun...@insightbb.com> wrote in message
>>
>> news:1190564336.204834.191580@g4g2000hsf.googlegroups.com...
>>
>> > On 23 Sep, 07:29, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
>> >> "art" <aun...@insightbb.com> wrote in message
>> >>
>> >> >>news:1190486598.922907.215230@22g2000hsm.googlegroups.com...
>> >>
>> >> >> > On 22 Sep, 07:22, "Richard Fry" <r...@adams.net> wrote:
>> >> >> >> "art" <aun...@insightbb.com> wrote
>> >>
>> >> >> >> >The most efficient radiator is one wave length long where
>> >> >> >> >it is considered to be in equilibrium with a parallel electrical
>> >> >> >> >cuircuit.
>> >> >> >> >For most efficient radiation both the capacitance and the
>> >> >> >> >inductance must act as a energy storage such that when
>> >> >> >> >the terminals are shorted the energy is released in a burst
>> >> >> >> >such that radiation can begin. ... In the case of a fractional
>> >> >> >> >wave length radiator the pendulum type radiation is not
>> >> >> >> >available for radiation
>> >> >>
>> >> >> >> _____________
>> >> >>
>> >> >> >> Note (for one example of many) that in an antenna system consisting
>> >> >> >> of
>> >> >> >> a
>> >> >> >> 1/2-wave, center-fed dipole driven by a matched, balanced
>> >> >> >> transmission
>> >> >> >> line,
>> >> >> >> the dipole itself radiates virtually all of the r-f energy present
>> >> >> >> at
>> >> >> >> the
>> >> >> >> antenna feedpoint.
>> >> >>
>> >> >> >> The radiation efficiency of a system as in the above example, but
>> >> >> >> using a
>> >> >> >> full wave dipole is no better than the 1/2-wave version, other
>> >> >> >> things
>> >> >> >> equal.
>> >> >> >> The full wave version just has a different radiation pattern.

>>
>> >> >> RF
>>
>> >> > I don't know what your credentials are for you to make such a
>> >> > statement but it is a free world after all!
>> >> > A quad radiator is a wave length radiator with a gain more than a
>> >> > half
>> >> > wave as one sample.
>> >> > Computor programing confirmes more radiation from full wave antennas
>> >> > and mathematics according to Maxwell,s rules substantiate it. I can
>> >> > understand not believing computor programs but I am very interested
>> >> > in
>> >> > any mathematical data that would support your stand which is
>> >> > contrary
>> >> > to the mathematics that I and others support.
>> >> > What you are stating is that an attena in a series cuircit format
>> >> > produces the same radiation as a parallel or tank cuircuit. I am
>> >> > more
>> >> > than eager to read the contrary mathematical proof that is contrary
>> >> > to
>> >> > the mathematics that I hold true. You may have hit on the true
>> >> > explaqnation of radiation which Einstein, Planck and many others
>> >> > went
>> >> > to their grave without solving it
>> >> > Regards
>> >> > Art KB9MZ.....XG
>>
>> >> I dont know his credentials either but Richard is absolutly correct.
>> >> Efficency is the ability to radiate the signal and not turn it into
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>> >> Efficiency = (power applied to the antenna system - power turned into
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>> >> The best thing the OP can do for his existing antenna is install a
>> >> good
>> >> ground system and impedance matching networks, antenna tuner. If I
>> >> were
>> >> really serious about it I would invest in an antenna analyzer so I
>> >> would
>> >> know when my antenna is tuned for optimum match to my radio and log
>> >> the
>> >> settings of my tuner. With the ground system and antenna type he has I
>> >> am

>> >> sure the ground resistance is soaking up most of his signal. He would
>> >> surely
>> >> benifit from improving his ground system.
>>
>> >> Jimmie- Hide quoted text -
>>
>> >> - Show quoted text -
>>
>> > In comparing two antennas with similar omni direction radiation field
>> > I state that gain in the field is indicative of increased radiadion
>> > but that is a side issue brought up as often is in this newsgroup in
>> > tha absence of a point by point debate.
>>
>> No that is the point. An antenna can radiate no more energy than you put
>> into it. If you do something to increase the field intensity in one
>> direction the field intensity must decrease in other directions. Nothing
>> to
>> debate, it is a proven fact. A fact you will never accept because if you
>> do
>> you will also have to accept the your guassian antenna is just a
>> delusion.
>
>
> If you look at the field of a antenna that isr radiating an equal
> amount in all direction
> the volume of the radiation consists of usefull energy in the form of
> radiation.
> If another antenna with the same energy input provides a radiation
> field in all
> directions that is equal but at a larger radius than the prior antenna
> field the the latter antenna has gain
> over the prior antenna.
> If you compare any fractional ground mounted antenna with a full wave
> antenna the radius of the field
> willhave a difference of aprox 3 db and the resistive impedance will
> have a ratio of two to one.Note that gain is a measure of one radiator
> level against another and is no way a distorted field of radiation
> that has been manipulated by an additional near by radiator.
> A ground plane does nothing more than balancing the circuit provided
> such that current does not meander back thru the feed line and a
> ground plane is only necessary for a fractional wavelength circuit to
> balance the circuit as a whole. It eats up energy that would normally
> provide radiation in a circuit such as a full wave radiator. Without a
> good ground plane the impedance to a fractional wave length is
> difficult and usually not efficient and a lot less than that of a
> radiator that does have a good ground plane which is around30 ohms
> resistive which is 1/2 of the resistive impedance of a full wave
> radiator.
> As far as the Gaussian antenna it is not an illusion to those with an
> engineering background.

> For those without an engineering background to enable them to follow
> the logic do not have
> the know how to discredit anything and certainly can not measure the
> quality of life of those
> with understanding.
> If you cannot follow the science of antennas then you are doomed to
> be a follower, never a leader.
> and certainly not a judge.
> I'm gone for a month or so and will not be using this newsgroup during
> that time.
> Will be back in the fall
>
> Art
>
>>
>> It is a real shame that you have chosen a knowledge of antennas to be
>> such
>> an important measuring stick for the value of your existence.
>>
>> Jimmie
>>
>> Jimmie
>
>

1758. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 01:05:54 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46f9b069$0$28869$4c368faf@roadrunner.com>
Source record: 36088

> As far as the Gaussian antenna it is not an illusion to those with an
> engineering background.

Where did you get your Engineering degree? I want to make sure my kids stay
away from there.

Jimmie

1759. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 01:07:06 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fdcbbs$e99$1@news.albasani.net>
Source record: 36089

art wrote:

> ...
> I'm gone for a month or so and will not be using this newsgroup during
> that time.
> Will be back in the fall
>
> Art

Have a safe journey.

Somehow, I almost suspect we will coast into boredom here, without you!

"You won't have Nixon to kick around anymore, because, gentlemen, this
is my last press conference."--Richard M. Nixon (well, until fall ;-))

Regards,
JS

1760. Re: TA-33jr smaller element stuck in larger element.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 01:12:26 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fdcbls$e99$2@news.albasani.net>
Source record: 35940

Anti-PC wrote:
> I have a very old Mosley TA-33 Jr antenna and one element; the smaller tube
> is stuck in the larger tube. This is the middle tube and only 3 foot long
> and about 3/4 inches in diameter with about 1 inch sticking out of the
> larger tube. I have tried pulling then apart with a bumper jack and vice
> grips but have had no luck. The elements are not bent nor do they have any
> dents. I suspects oxidation of the elements is the problem. I have also
> tried using ammonia but no help. Any suggestions on pulling then apart would
> be greatly appreciated. .
> Bob, AA8X
>
>

A penetrating oil (as has already been suggested) is a good trick.

Then, with a rubber mallet, gently, but firmly, strike the outer
conductor (where it covers the inner conductor)--with the conductor
placed on a firm surface (hardwood, etc.), all the time rotating the
conductor betweens strikes.

Has worked EVERY time for me!

Regards,
JS

1761. Re: Double ended Yagi???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 01:12:55 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <9miKi.65081$Y7.42319@bignews3.bellsouth.net>
Source record: 35941

"Jimmie D" <GFENDER@carolina.rr.com> wrote in message
news:46f929ba$1$26339$4c368faf@roadrunner.com...
> into my mind wa what if the rail was the boom for one long yagi with a
> driven element and reflector at each end and the rest of the space between
> populated with directors. Would anyone care to model this.
>
> Jimmie

Ya'rekon the antenna gain would be enuff to overcome the transmission-line losses? :-)
might make a decent boom for a 160m yagi, but turning the darn thing might be a job.

1762. #4, #6 & #8 aluminum ground wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 01:36:00 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fdcd21$h5r$1@news.albasani.net>
Source record: 35942

Anyone know of a good source?

Have completely exhausted my supply ... stuff was easy to find a few
years ago.

Regards,
JS

1763. Re: Double ended Yagi???

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 02:59:00 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46f9cae9$0$32544$4c368faf@roadrunner.com>
Source record: 35943

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:9miKi.65081$Y7.42319@bignews3.bellsouth.net...
>
> "Jimmie D" <GFENDER@carolina.rr.com> wrote in message
> news:46f929ba$1$26339$4c368faf@roadrunner.com...
>> into my mind wa what if the rail was the boom for one long yagi with a
>> driven element and reflector at each end and the rest of the space
>> between populated with directors. Would anyone care to model this.
>>
>> Jimmie
>
>
> Ya'rekon the antenna gain would be enuff to overcome the transmission-line
> losses? :-)
> might make a decent boom for a 160m yagi, but turning the darn thing might
> be a job.
>
>
>

Yeah it kind of sounds weird when you edit away most of the origonal post.

Jimmie

1764. Re: #4, #6 & #8 aluminum ground wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 03:37:51 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <aeOdndF70e2eSWTbnZ2dnUVZ_tuonZ2d@comcast.com>
Source record: 35944

"John Smith" <assemblywizard@gmail.com> wrote in message
news:fdcd21$h5r$1@news.albasani.net...
> Anyone know of a good source?
>
> Have completely exhausted my supply ... stuff was easy to find a few years
> ago.
>
> Regards,
> JS
I believe Radio Shack sells #6. Might be special order.

Tam/WB2TT

1765. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 06:11:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <mbmjf3tdul571jsd7hpsp7e6hp9lc2eko6@4ax.com>
Source record: 35945

Hi All,

Since Artifice has left us with his errors intact, they can be resolved quite simply before he returns later with more interesting dismissals of his previous incarnations of "the truth."

On Tue, 25 Sep 2007 17:34:22 -0700, art <aunwin@insightbb.com> wrote:

>If you look at the field of a antenna that isr radiating an equal
>amount in all direction
>the volume of the radiation consists of usefull energy in the form of
>radiation.

This volume, then, contains a fixed energy. Fairly simple stuff as it happens 365.25... days of the year with the sun. Within the arc of any orbit, there is so much energy from that same sun [hearing the scrabbling of little feet in the cellar insisting stars and such fill the void, I will simply bait the traps with better cheese].

>If another antenna with the same energy input provides a radiation
>field in all
>directions that is equal but at a larger radius than the prior antenna
>field

It doesn't need to be another sun, but if our "creater" insists, I will return to that heresy.

Anyway [gad this is abysmally distant from SWLing and QRM - Dirk, you can't possibly still be with us can you?], we have the same energy within the volume of a larger orbit. Naturally, any inhabitant at the original orbit must be wondering about this state of affairs.

Well, this latter Sun provides the same energy (unless more energy is added, courtesy of our Great Decider bombing it with hydregen bombs in the chance of killing Osama Bin Forgotten).

Um, sorry for the parenthetics, but Arty has never exhibited a very good command of English - I suppose this means I will have to examine both pair o' doxes.

> the the latter antenna has gain over the prior antenna.

In fact, this is true in the classic engineering sense - to the degree of negative gain. Given the obscurity of this missive of his, we must judge this fact escaped him entirely.

To illustrate, same sun, same energy, different orbits, we return to the original orbit to find less sunlight at noon (it has been

squandered to fill more volume). Any gain predictions are found in the debit column of the account books.

---------- Part Deux ----------

OK, so somehow we nuked the sun to achieve this new golden age of illuminating the expanded cosmos with the "same" energy (see how myths are born?).

The inhabitant at the original orbit now sees a brighter city on the hill. His sunburn is manifest in a cancer several years later (blame technology). The inhabitants at the outer orbit now enjoy the prospects of a future temperate climate (once the global ice shell melts).

As we don't know the particulars of the orbit (Arty is never very useful about providing facts that matter), they could be orthogonal - or at least the traditional scientist (providing he has copies of those books burnt by devotees of this "church of gain") would have to allow for any point on the surface of a sphere.

However, if anyone is still reading this, what have been described were TWO Isotropic antennas. As such, the only gain achieved is by nuking the sun (cost $1 trillion per election cycle). In any interpretation, no gain can be assigned to any antenna.

Of course, we all know that.

---------- Section C ----------

>If you compare any fractional ground mounted antenna with a full wave
>antenna the radius of the field
>willhave a difference of aprox 3 db

As I've cautioned Arty in the past, we know what you don't mean - and the light at the end of this tunnel ... we will skip the remainder of doubling cliches here.

Arty is going to disappointed to discover that once again (always) the facts he showers upon us are diametrically opposed to the fundamentals of his proposition. Yes, there is a 3dB difference, but it certainly doesn't favor the full wave (sic) antenna.

> and the resistive impedance will
>have a ratio of two to one.

Fractional/Full-wave? Not even close - unless this is expressed in non-linear, 18 dimensional, gaussian string mathematics. It isn't given that the full mathematical treatments of the total output from Art wouldn't fill the back of a business card.

>Note that gain is a measure of one radiator
>level against another and is no way a distorted field of radiation
>that has been manipulated by an additional near by radiator.

I can only wonder if this fractional ground mounted antenna is on some crystalline planet circling a faint red dwarf.

>A ground plane does nothing more than balancing the circuit provided

Ground mounted and ground plane(d) is not the same thing. If we are to divorce this analysis from the distortions of ground (as in the ground of earth) by mounting it in a ground plane (hung in free space); then this 3 dB gain is going to evaporate like the White House promises of a green card to migrant workers.

> If you cannot follow the science of antennas then you are doomed to >be a follower, never a leader.

I suppose this admission will inform all future announcements.

>Will be back in the fall

A dollar short and an equinox late informs us now.

My bets are follow ups in a very few moments ;-)

73's
Richard Clark, KB7QHC

1766. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 09:14:16 UTC
From: Navtex-Fan <No@way.invalid>
Message-ID: <mn.d2a27d79b0214025.59994@way.invalid>
Source record: 35946

On 2007-09-26, Richard Clark (67.168.144.41) wrote in
message <mbmjf3tdul571jsd7hpsp7e6hp9lc2eko6@4ax.com>

> Anyway [gad this is abysmally distant from SWLing and QRM - Dirk, you
> can't possibly still be with us can you?],

Sure Richard, I'm still listening in on this thread; I'm now thinking
about a 518KHz Gaussian antenna... :0)

BTW, it has been raining over here for 2 days, and the QRM levels are
still fine!

I have also done the following experiment: Instead of the commercial
"magnetic balun" I was using, I have now rolled my own 1:9 unun. The
main difference with the MLB is that the unun has isolated windings.
The primary is grounded to the earth rods, the secondary is grounded
via the receiver. I thought this was a better solution with regard to
ground loops.

73's - Dirk

1767. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 11:08:00 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <k4rKi.813$4V6.350@newssvr14.news.prodigy.net>
Source record: 35947

Richard Clark wrote:
> However, if anyone is still reading this, what have been described
> were TWO Isotropic antennas. As such, the only gain achieved is by
> nuking the sun (cost $1 trillion per election cycle). In any
> interpretation, no gain can be assigned to any antenna.

Maybe it's the same kind of gain that causes
reflections from non-reflective glass to be
brighter than the surface of the sun. :-)
--
73, Cecil http://www.w5dxp.com

1768. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 12:02:20 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fddhofegv1@aioe.org>
Source record: 35948

"art" <aun*@insightbb.com> wrote in message
news:1190766862.070971.189670@50g2000hsm.googlegroups.com...
> If you compare any fractional ground mounted antenna with a
> full wave antenna the radius of the field will have a difference
> of aprox 3 db and the resistive impedance will have a ratio of two
> to one. Note that gain is a measure of one radiator level against
> another and is no way a distorted field of radiation that has been
> manipulated by an additional near by radiator.

----

art -- the difference in the gains of ground-mounted monopole radiators of different heights is related to the height of the monopole, and the effect that has on its r-f current distribution; therefore its radiation pattern.

The link below leads to a pattern and gain comparison of several monopole heights commonly used in commercial AM broadcasting, over a perfect ground plane.

Note that a 1/2-wave, ground-mounted monopole for these conditions has a pattern and gain identical to that of a 1-wave, center-fed dipole in free space. Also note that there are three radiator heights taller than 1/2-wave, whose gains are higher than the 1/2-wave (or a full wave in free space).

In all cases, the area under the curve is the same for each radiator plotted (mind the dB scale), showing that for a given input power each monopole radiates the same total power into space regardless of the shape of its pattern.

No nearby radiator was needed or used in the generation of these patterns.

So there's something for you to consider while you're gone for a month.

http://i62.photobucket.com/albums/h85/rfry-100/MWElPatComparison.jpg

RF

1769. Antenna optimizer based on NEC2/NEC4

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 14:12:02 UTC
From: oeguet@gmx.de
Message-ID: <1190815922.471905.285070@r29g2000hsg.googlegroups.com>
Source record: 35949

Hello,

I am searching for an antenne optimizer based on NEC2/NEC4. I know the
well known (and best useful) tool 4nec2 (my special thanks to Arie).
On some antenna optimizing problems, using the traditional hill
climbing method (gradient method) fails due to local minima problem.
The optimizing function "evolve" gets more usefull results.
I would like to try some another antenna optimizing tool. Are there
any other antenna optimizing tools based on NEC2/NEC4?
Many thanks for any hints.

Regards,
Aziz

1770. Re: coaxial dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 15:00:42 UTC
From: "H. Adam Stevens" <hstevens@totalaccess.net>
Message-ID: <13fkt10bk7mj7d@corp.supernews.com>
Source record: 35950

"Dale Parfitt" <parinc@verizon.net> wrote in message
news:k7jHi.550$6o2.304@trnddc05...
>
> > Hello Bill,
>>
>> I can understand that the coax dipoles you built are somewhat more
>> broadbanded than a simple dipole. However,
>> I suspect that you are unaware of the reason for the broadbanding. Sorry
>> to tell you, but it is achieved only
>> by the resistive losses in the coax, and not by the reactance obtained by
>> the two sections of shorted coax, as
>> incorrectly stated in several published articles.
>>
>> I have made extensive measurements and calculations that prove my
>> statement above. I have reported these
>> measurements and calculations in both QST and in my book 'Reflections'.
>> The QST reference appears in the
>> Technical Correspondence, September 1976 issue, and in Chapter 18 in
>> Reflections. You can read Chapter 18 from
>> my web page at www.w2du.com.
>>
>> On the other hand, realistic broadbanding, without the loss introduced by
>> the resistances in the coaxial
>> dipole, can be obtained by the 'cage' dipole, using several parallel
>> wires separated by spacers, as mentioned
>> other posts appearing in this thread.
>>
>> Walt, W2DU
>
> Hi Walt et al,
> I was going to point out the same flawed thinking. I believe Frank Witt
> also published the analysis for the flawed reasoning of the bazooka stubs
> correcting for the reactance of the dipole off resonance. He also
> published coaxial stub designs that did work in QST and several of the
> ARRL compendia.
> It is amazing to me that the bazooka is still used given the alternatives.
> One sight where thay are sold claims more gain too!
>
> Dale W4OP
>

Hello Walt, Dale, et al

I thought we worked this out years ago.
The parallel-resonant network of the stubs lowers the SWR some very near

resonance by oscillating at the driven frequency and storing the small amount of energy that would be reflected back otherwise, but a driven circuit won't oscillate very far from resonance, and it does nothing for bandwidth. That's due to loss, as Walt proved long ago. Increasing the diameter of the radiator, as Walt pointed out, does work. There was a good recent QST article on just such an antenna.

73
H.
NQ5H

1771. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 16:56:27 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <%awKi.4870$tJ4.3682@trnddc05>
Source record: 35951

"Nate Bargmann" <n0nb.DO.NOT.SPAM@ME.networksplus.net> wrote in message
news:pan.2007.09.25.21.53.07@ME.networksplus.net...
> On Sun, 23 Sep 2007 12:59:49 -0500, Richard Fry wrote:
>
>> "Rick wrote>
>>>
>>> ... What say you all?
>>
>> Read "Ground Systems as a Factor in Antenna Efficiency" by Brown, Lewis
>> & Epstein of RCA Labs, published in the June, 1937 issue of The
>> Proceedings of the I.R.E.
>>
>> It proves otherwise.
>
> Honest question, does it matter whether the objective is a strong ground
> wave as in AM broadcast or skywave as in amateur operation?
>
> I am installing a Hustler 4BTV this fall and have put down (so far) 16
> radials that range from about 18 to 35 feet in length due to my servere
> space restrictions. I may add 16 more later this fall as an experiment.
>
> 73, de Nate >>
>
It would be interesting to follow the change in VSWR as you add individual radials. Some years ago, there was a discussion of adding radials until the VSWR stopped increasing. This was based on an expected feedpoint resistance of 36 ohms, and an assumption that the ground losses were 15 ohms or less. So at the worst case, the VSWR was near 1:1. The best case, with a ground loss approaching 0 ohms, would have a VSWR of 50/36= 1.39:1.

I want to attribute the original discussion to W2DU, but I stop short of that, in case I don't remember correctly.

1772. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 17:08:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <g73lf3ldr0buf5fdrj5f9s2554m3o7l68g@4ax.com>
Source record: 35952

On Wed, 26 Sep 2007 09:14:16 GMT, Navtex-Fan <No@way.invalid> wrote:

>BTW, it has been raining over here for 2 days, and the QRM levels are
>still fine!

Hi Dirk,

Great. We've been fog bound.

I recently bought a $40 SWL radio, and its noise comes from the
display with about 3 MHz bandwidth around the 49M band. I will soon
pop it open for some corrective surgery.

>I have also done the following experiment: Instead of the commercial
>"magnetic balun" I was using, I have now rolled my own 1:9 unun. The
>main difference with the MLB is that the unun has isolated windings.
>The primary is grounded to the earth rods, the secondary is grounded
>via the receiver. I thought this was a better solution with regard to
>ground loops.

Not really - it may cast the problem into a different coupling
mechanism. You still have capacitive coupling and you want to ground
the smallest signal end (the antenna), not the load end (the
receiver).

However, it sounds like it didn't make a substantial difference, or
any difference (seeing as you would have mentioned performance). This
suggests you have driven out as much noise as you can. Anything else
is coming in through the air from afar.

I've read (and tried) all the "expert" SWLing opinions of what pass
for BalUns (even professionals rarely get it right) and experience
still shows a tuner performs better - unless, of course, you really
have a sloppy installation (no choking, poor grounds, poor balance,
running lines past noise sources, the usual stuff).

73's
Richard Clark, KB7QHC

1773. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 17:14:16 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9l4lf3hq6fg6mo00qb79889v1ra9v7a3fv@4ax.com>
Source record: 35953

On Wed, 26 Sep 2007 16:56:27 GMT, "Wayne" <mygarbagecan@verizon.net>
wrote:

>It would be interesting to follow the change in VSWR as you add individual
>radials. Some years ago, there was a discussion of adding radials until the
>VSWR stopped increasing. This was based on an expected feedpoint resistance
>of 36 ohms, and an assumption that the ground losses were 15 ohms or less.
>So at the worst case, the VSWR was near 1:1. The best case, with a ground
>loss approaching 0 ohms, would have a VSWR of 50/36= 1.39:1.

Hi Wayne,

This strategy may also have you stop adding radials too early when
your antenna presented 36 Ohms looking into a ground loss of 33 Ohms
(same SWR of 1.39).

73's
Richard Clark, KB7QHC

1774. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 17:42:51 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fde5ms$s3p$1@aioe.org>
Source record: 35954

"Richard Clark" <kb7*@comcast.net> wrote in message
> The best case, with a ground loss approaching 0 ohms, would
> have a VSWR of 50/36= 1.39:1.

A set of 120 buried radials each at least 1/4-wave long (free space value) will produce an r-f ground resistance of around 2 ohms, maybe less in soil with very good conductivity.

But in any case the impedance existing between the base of a series-fed vertical monopole and the common point of the buried radials will depend on the electrical height of the monopole which includes the ratio of its height to its width, as well as the r-f resistance in the ground system itself.

Broadcast stations will install the tower and radials, measure the Z from the tower base to the radials, and transform whatever that value is to 50 +j0 ohms using a network at the base of the tower.

Fewer radials will mean that the ground loss will increase, and system radiation efficiency will decrease (even if the VSWR is 1:1)

RF

1775. Re: #4, #6 & #8 aluminum ground wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 17:45:27 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <7c6lf3hdhle179dc2rm3cs73j7rsa0gnpb@4ax.com>
Source record: 35955

On Tue, 25 Sep 2007 18:36:00 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Anyone know of a good source?

Nearest electrician/electrical supply house -- should be in your
yellow pages.

Or, the Wireman by mail order -- he lists copper in those sizes.

bob
k5qwg

>
>Have completely exhausted my supply ... stuff was easy to find a few
>years ago.
>
>Regards,
>JS

1776. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 18:33:02 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fde8km$6l1$1@news.service.uci.edu>
Source record: 35956

John Smith wrote:
> Perhaps?
>
> "As far as the laws of mathematics refer to reality, they are not
> certain; as far as they are certain, they do not refer to
> reality."--Albert Einstein
>
> And, I humbly propose:
>
> "Too often, the ignorant are quick to conceal their ignorance in
> complexity not well grasped by common men."--John Smith

I think that's true. I like it.

I like this one too:

"He who knows, does not speak. He who speaks, does not know."

ac6xg

1777. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 19:04:44 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <g3yKi.55370$YL5.27541@newssvr29.news.prodigy.net>
Source record: 35957

Jim Kelley wrote:
> "He who knows, does not speak. He who speaks, does not know."

In the same vein: Better to appear ignorant than
open one's mouth and remove all doubt. :-)
--
73, Cecil http://www.w5dxp.com

1778. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 19:13:44 UTC
From: Navtex-Fan <No@way.invalid>
Message-ID: <mn.d4f97d795e20aa90.59994@way.invalid>
Source record: 35958

On 2007-09-26, Richard Clark (67.168.144.41) wrote in
message <g73lf3ldr0buf5fdrj5f9s2554m3o7l68g@4ax.com>

>> I have also done the following experiment: Instead of the commercial
>> "magnetic balun" I was using, I have now rolled my own 1:9 unun. The
>> main difference with the MLB is that the unun has isolated windings.
>> The primary is grounded to the earth rods, the secondary is grounded
>> via the receiver. I thought this was a better solution with regard to
>> ground loops.
>
> Not really - it may cast the problem into a different coupling
> mechanism. You still have capacitive coupling and you want to ground
> the smallest signal end (the antenna), not the load end (the
> receiver).
>

Ehrm... that's exactly what I did. For a SWL, the antenna end is the
primary end :0)

> However, it sounds like it didn't make a substantial difference, or
> any difference (seeing as you would have mentioned performance).

QRM levels were the same, very low to totally absent. Signal quality/
performance seems to be the same.

>
> I've read (and tried) all the "expert" SWLing opinions of what pass
> for BalUns (even professionals rarely get it right) and experience
> still shows a tuner performs better - unless, of course, you really
> have a sloppy installation (no choking, poor grounds, poor balance,
> running lines past noise sources, the usual stuff).

There is indeed a lot of confusing stuff about baluns circulating in
magazines and on the internet. Is thought it was only possible to use a
antenna tuner at the receiver end when the antenna wire is directly
connected to the tuner, (that is: without using a coax line)
Right or wrong?

73's - Dirk

1779. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 19:32:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fdec45bmg1@news.albasani.net>
Source record: 35959

Jim Kelley wrote:

> ...
> I think that's true. I like it.
>
> I like this one too:
>
> "He who knows, does not speak. He who speaks, does not know."
>
> ac6xg
>
>

I disagree ...

"Those who seldom open their mouths seldom have opportunity to cure their ignorance."--John Smith

"To admit ones ignorance implies the desire to dispel it."--John Smith

"There are no stupid questions, only people too stupid to pose questions."--John Smith

"Those who attempt control usually end up stagnating in rec.radio.amateur.moderated"--John Smith

Regards,
JS

1780. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 19:32:55 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fdec53$9em$1@news.service.uci.edu>
Source record: 35961

Cecil Moore wrote:
> Jim Kelley wrote:
>
>> "He who knows, does not speak. He who speaks, does not know."
>
>
> In the same vein: Better to appear ignorant than
> open one's mouth and remove all doubt. :-)

I agree. Standing around with your mouth hanging open does tend to
make one appear ignorant. :-)

ac6xg

1781. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 19:35:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fdecaabmg2@news.albasani.net>
Source record: 35960

Cecil Moore wrote:

> In the same vein: Better to appear ignorant than
> open one's mouth and remove all doubt. :-)

Cecil:

You got it pegged.

However, admitting ones ignorance demands they attempt to remedy it.
And, certainly demands more respect ...

In such a world, the silent-ignorant-majority would rein supreme! (and,
most likely, only hold dialog in CW) ;-)

Regards,
JS

1782. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 19:40:56 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fdeck5$9ks$1@news.service.uci.edu>
Source record: 35962

John Smith wrote:

> Jim Kelley wrote:
>
>> ...
>> I think that's true. I like it.
>>
>> I like this one too:
>>
>> "He who knows, does not speak. He who speaks, does not know."
>>
>> ac6xg
>>
>>
>
> I disagree ...
>
> "Those who seldom open their mouths seldom have opportunity to cure
> their ignorance."--John Smith
>
> "To admit ones ignorance implies the desire to dispel it."--John Smith
>
> "There are no stupid questions, only people too stupid to pose
> questions."--John Smith
>
> "Those who attempt control usually end up stagnating in
> rec.radio.amateur.moderated"--John Smith
>

"Foolishness is not diluted by it's own abundance." Jim Kelley

ac6xg

1783. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 20:03:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fdedu6erg1@news.albasani.net>
Source record: 35963

Jim Kelley wrote:

> ...
> "Foolishness is not diluted by it's own abundance." Jim Kelley
>
> ac6xg

"Suggestions of silence cloaked in writings constructed to imply wisdom
are still only a circular path to the same ignorance."--John Smith

"The forge of true knowledge exists in the form of debated and differing
ideas."--John Smith

Regards,
JS

1784. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 20:22:18 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <_bzKi.532$ih1.399@nlpi068.nbdc.sbc.com>
Source record: 35964

Navtex-Fan wrote:
> There is indeed a lot of confusing stuff about baluns circulating in
> magazines and on the internet. Is thought it was only possible to use a
> antenna tuner at the receiver end when the antenna wire is directly
> connected to the tuner, (that is: without using a coax line)
> Right or wrong?

What do you do when the antenna wire is not located
at the antenna tuner? Use a transmission line to
achieve maximum power transfer from the antenna to
the receiver (and vice versa for transmitting).
That's the basic function of transmission lines -
transfer the maximum amount of power from one point
to another with the least amount of losses.

Any reasonable transmission line impedance can be
brought to resonance through the use of stubs. An
antenna tuner performs that same maximum available
power transfer matching function.
--
73, Cecil http://www.w5dxp.com

1785. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 20:31:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <b9dlf31ne0hkikm65s6uu59tji39m0b37s@4ax.com>
Source record: 35965

On Wed, 26 Sep 2007 19:13:44 GMT, Navtex-Fan <No@way.invalid> wrote:
>> Not really - it may cast the problem into a different coupling
>> mechanism. You still have capacitive coupling and you want to ground
>> the smallest signal end (the antenna), not the load end (the
>> receiver).
>>
>
>Ehrm... that's exactly what I did. For a SWL, the antenna end is the
>primary end :0)

Hi Dirk,

But you lifted the secondary ground and use the ground at the receiver end (if I understand your description). This creates a capacitive link into the front end through that long path. By the designation of UnUn, both sides (Pri/Sec) of the transformer go to ground. For low noise, this grounding should be at the antenna end of the transmission line (which re-introduces the possibility of ground loops if the receiver is also grounded). You also lose choking action (an UnUn or BalUn does not necessarily choke common mode currents).

>> However, it sounds like it didn't make a substantial difference, or
>> any difference (seeing as you would have mentioned performance).
>
>QRM levels were the same, very low to totally absent. Signal quality/
>performance seems to be the same.

Then, as the song from Oklahoma suggests, "you've gone about as far as you can go."

A simple test is to tune off frequency to background noise (absolutely no signals). Remove the antenna, what happened to the noise level?

>There is indeed a lot of confusing stuff about baluns circulating in
>magazines and on the internet. Is thought it was only possible to use a
>antenna tuner at the receiver end when the antenna wire is directly
>connected to the tuner, (that is: without using a coax line)
>Right or wrong?

Yes (for the simple answer).

Depends (for the complex answer).

It is far easier to try and see. The issue is one of mismatch and fully coupling ALL of the available power in the signal into your front end. You want a transmission line instead of a drop wire so that you cut down on QRM from devices in the home near you. Hence the

choking of the line to cut down on nearby home noise that conducts/inducts onto the exterior of the shield traveling down to the antenna connection and coming back into the front-end. If you float that far end at the antenna, the noise will simply leap the choke and capacitively couple to the antenna and then travel back into the front end with your desired signal (what a bitch).

The conventional usage of BalUns or UnUns for SWL is for matching, not noise control. However, through careful selection of those BalUns and UnUns by their construction methods, you can get both. Unfortunately, most SWL BalUn UnUn designs are built backwards with the thought that the typical home SWL antenna represents a Hi-Z transmission line with respect to earth. By and large that is true, but as a signal source, most home SWL antennas are Low-Res, Hi-Imp sources. Yes, a Hi-Z results, but it is the R that counts and the step-down is discarding power.

I am well aware that testimonials abound to "prove" nothing is lost. I am equally aware that there are negative testimonials too. As such, this contradiction gives the lie to the credited theory of "magnetic baluns" (the term being a dead giveaway to a con job). I've also read the apology that SWLers don't have time to tune up with every frequency change - sounds like whining slackers to me. Tuners come with knobs and numbered scales. It takes very little effort to log settings once for a band, and use them forever after with slight adjustments to pull in DX.

Power matching involves equalizing the source R to the load R and eliminating the source/load I through conjugation. This requires a tuner which supplies the necessary L for the excess C, or versa-vice (it is, of course, more complex that this, but this convenient short hand is sufficient to explore the topic).

Just to cover all bases, there will be problem tunes for certain frequency/line-length/antenna-length combinations. There is no universal fix. You can anticipate this by building a fan antenna, or using cage construction techniques. Something tells me that this is probably not an option or even within the scope of your interest.

73's
Richard Clark, KB7QHC

1786. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 20:39:43 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <kszKi.537$ih1.478@nlpi068.nbdc.sbc.com>
Source record: 35966

John Smith wrote:
> However, admitting ones ignorance demands they attempt to remedy it.
> And, certainly demands more respect ...

I've found that leading questions, no matter how
ignorant-sounding, are a good learning tool for
everyone, including me. :-)

Example question to someone on eHam.net who says:
"All you need is a 4:1 balun placed outside the shack
at the end of the balanced line to convert to coax."

Where are you going to find a 200 ohm impedance to
match that 4:1 balun that you are recommending for
use in your non-resonant system?
--
73, Cecil http://www.w5dxp.com

1787. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 21:14:22 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <OYzKi.5422$Pc3.5047@trndny09>
Source record: 35967

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:9l4lf3hq6fg6mo00qb79889v1ra9v7a3fv@4ax.com...
> On Wed, 26 Sep 2007 16:56:27 GMT, "Wayne" <mygarbagecan@verizon.net>
> wrote:
>
>>It would be interesting to follow the change in VSWR as you add individual
>>radials. Some years ago, there was a discussion of adding radials until
>>the
>>VSWR stopped increasing. This was based on an expected feedpoint
>>resistance
>>of 36 ohms, and an assumption that the ground losses were 15 ohms or less.
>>So at the worst case, the VSWR was near 1:1. The best case, with a ground
>>loss approaching 0 ohms, would have a VSWR of 50/36= 1.39:1.
>
> Hi Wayne,
>
> This strategy may also have you stop adding radials too early when
> your antenna presented 36 Ohms looking into a ground loss of 33 Ohms
> (same SWR of 1.39).
>
> 73's
> Richard Clark, KB7QHC

Right. I guess the better way to state it is to stop adding radials when
the r component stops dropping. I've always wanted to try that experiment,
but real estate considerations have prevented it.

1788. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 21:17:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fdei8ukrk1@news.albasani.net>
Source record: 35968

Cecil Moore wrote:
> John Smith wrote:
>> However, admitting ones ignorance demands they attempt to remedy it.
>> And, certainly demands more respect ...
>
> I've found that leading questions, no matter how
> ignorant-sounding, are a good learning tool for
> everyone, including me. :-)
>
> Example question to someone on eHam.net who says:
> "All you need is a 4:1 balun placed outside the shack
> at the end of the balanced line to convert to coax."
>
> Where are you going to find a 200 ohm impedance to
> match that 4:1 balun that you are recommending for
> use in your non-resonant system?

With no system to tune the 200 (+/-) antenna to resonance--only at a relatively few frequencies on the dial--unless the antenna, itself, was only constructed for use on a relatively narrow band (or, perhaps harmonically related narrow bands) ... sounds to me, some system of causing resonance was implied?

However, and perhaps contrary to logic, I have seen 4:1 (2:1 to 9:1 for that matter--and certainly "choke baluns") baluns cause a general gain in general performance--and do this more often than not.

Forced to report just what my "eyes" have seen--I, "ignorantly", must state--go figure ... but then again, if it walks like a duck ...

Regards,
JS

1789. Re: Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 21:51:25 UTC
From: merlin-7 <merlin-7@sc.rr.com>
Message-ID: <46fad4e3$0$17090$4c368faf@roadrunner.com>
Source record: 35969

```
"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:Y2gKi.3074$9r4.315@trnddc04...
>
> "merlin-7" <merlin-7@sc.rr.com> wrote in message
> news:46f989e6$0$17148$4c368faf@roadrunner.com...
> >
> > "Jerry Martes" <j.jmartes@verizon.net> wrote in message
> > news:ZmZJi.5019$Nn4.3376@trnddc02...
> >>
> >> "merlin-7" <merlin-7@sc.rr.com> wrote in message
> >> news:46f8514e$0$19617$4c368faf@roadrunner.com...
> >> >I like lakeviews ...
> >> > http://www.hamstick.com/9007.htm
> >> >
> >> > lots of gain with a pattern great for boats. you may need the ground
> > plane
> >> > kit but I can tell you, this is a great antenna for the price.
> >> > Besides, I have not killed mine yet. It's a brute.. I also get great
> >> > reports in areas where a 1/4 wave cannot even (key up the repeater)
> >> >
> >> > Just an idea...
> >>
> >>
> >> Hi Merlin
> >>
> >> Do you have any suggestions about how the manufacture rates the
power
> >> handling capability of that hamstick?
> >>
> >> Jerry
> >>
> > I do not, sorry ..
> > I only pump 65 watts into mine but from looking at the way it's made, I
> > bet
> > it could take 1,500 watts.
> > However, I do not think that I would like 1,500 watts output That close
to
> > me...
> >
> > It is a 7 foot antenna, stacked 5/8-5/8-1/4, I think. I do know that it
> > puts out a really flat pattern (I do not chat much on 2 meters with
> > airplanes)
>
> Hi Merlin
```

>
> I was actually curious about the meaning of the "DC" they use to define
> the power rating of the 2 meter hamstick.
>
> Jerry
>
Hi Jerry.

I did not catch the DC part when I looked at the page.

You can always e-mail them and ask, they are pretty quick about returning
e-mails (unless they are at a ham fest somewhere) and they ship fast.

1790. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 22:54:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13floq7tkjj8s2d@corp.supernews.com>
Source record: 35970

Jim Kelley wrote:
>
> I think that's true. I like it.
>
> I like this one too:
>
> "He who knows, does not speak. He who speaks, does not know."

The Peter Sellers movie "Being There" was a clear illustration of the consequences of applying this principle.

Roy Lewallen, W7EL

1791. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 23:20:04 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fdepg2$jq2$1@news.service.uci.edu>
Source record: 35971

Roy Lewallen wrote:
> Jim Kelley wrote:
>
>>
>> I think that's true. I like it.
>>
>> I like this one too:
>>
>> "He who knows, does not speak. He who speaks, does not know."
>
>
> The Peter Sellers movie "Being There" was a clear illustration of the
> consequences of applying this principle.
>
> Roy Lewallen, W7EL

Perhaps I should have said "Some people just don't know when to shut up." I think that much is true without exception. I now know that I should have shut up about 3 posts back. :-)

ac6xg

1792. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-26 23:59:04 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fderp3$8ft$1@news.albasani.net>
Source record: 35972

Jim Kelley wrote:

> ...
> Perhaps I should have said "Some people just don't know when to shut
> up." I think that much is true without exception. I now know that I
> should have shut up about 3 posts back. :-)
>
> ac6xg

Perhaps the problems is, no one can possibly appreciate what you say as
much as you yourself--let it be enough it pleases you! :-)

Regards,
JS

1793. Re: Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 02:34:28 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <UEEKi.39$6h.33@trnddc06>
Source record: 35973

>> Hi Merlin
>>
>> I was actually curious about the meaning of the "DC" they use to define
>> the power rating of the 2 meter hamstick.
>>
>> Jerry
>>
> Hi Jerry.
>
> I did not catch the DC part when I looked at the page.
>
> You can always e-mail them and ask, they are pretty quick about returning
> e-mails (unless they are at a ham fest somewhere) and they ship fast.

Hi Merlin

I am mainly interested in expanding my understanding of antennas and terminology. My first thought was that there is a way of measuring power that I didnt know about, but everyone else does understand. Since you arent familiar with the meaning of DC when associated with 144 MHz antenna power handling, I am comfortable not knowing either.

Thanks
Jerry

1794. Re: Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 05:46:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fdfg41$gn1$1@news.albasani.net>
Source record: 35974

Jerry Martes wrote:

> I am mainly interested in expanding my understanding of antennas and
> terminology. My first thought was that there is a way of measuring power
> that I didnt know about, but everyone else does understand. Since you
> arent familiar with the meaning of DC when associated with 144 MHz antenna
> power handling, I am comfortable not knowing either.
>
> Thanks
> Jerry
>

Jerry:

When dealing with xmitters and antennas, it is good to know about ac
watt meters--and, specifically, know enough to get one
responsive/accurate to the frequencies you have in interest.

DC has little to do with xmitters, and, even those of VLF capabilities
... but then, you should get others opinions.

P.S. Beware the "cardboard gurus!"

Regards,
JS

1795. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 05:54:21 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46fb457b$0$11068$4c368faf@roadrunner.com>
Source record: 35975

"Navtex-Fan" <No@way.invalid> wrote in message
news:mn.d2a27d79b0214025.59994@way.invalid...
> On 2007-09-26, Richard Clark (67.168.144.41) wrote in
> message <mbmjf3tdul571jsd7hpsp7e6hp9lc2eko6@4ax.com>
>
>
>> Anyway [gad this is abysmally distant from SWLing and QRM - Dirk, you
>> can't possibly still be with us can you?],
>
> Sure Richard, I'm still listening in on this thread; I'm now thinking
> about a 518KHz Gaussian antenna... :0)
>
> BTW, it has been raining over here for 2 days, and the QRM levels are
> still fine!
>
> I have also done the following experiment: Instead of the commercial
> "magnetic balun" I was using, I have now rolled my own 1:9 unun. The main
> difference with the MLB is that the unun has isolated windings. The
> primary is grounded to the earth rods, the secondary is grounded via the
> receiver. I thought this was a better solution with regard to ground
> loops.
>
> 73's - Dirk
>
>

Dirk I suspect the feed point impedance of your antenna is less than 1 ohm
at 518Khz. This make a good ground imperative. With just a couple of ground
rods for a ground I suspect your ground impedance is probably around 20 ohms
for 60hz and considerably higher for RF. Putting in 120 radials 1/4wl long
would be a tall order but perhaps you could add 20 or so as long as you can.

Jimmie

1796. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 09:13:38 UTC
From: Navtex-Fan <No@way.invalid>
Message-ID: <mn.daa17d79d93f962a.59994@way.invalid>
Source record: 35976

On 2007-09-27, Jimmie D (71.68.80.78) wrote in
message <46fb457b$0$11068$4c368faf@roadrunner.com>

> "Navtex-Fan" <No@way.invalid> wrote in message
> news:mn.d2a27d79b0214025.59994@way.invalid...
>> On 2007-09-26, Richard Clark (67.168.144.41) wrote in
>> message <mbmjf3tdul571jsd7hpsp7e6hp9lc2eko6@4ax.com>
>>
>>
>>> Anyway [gad this is abysmally distant from SWLing and QRM - Dirk, you
>>> can't possibly still be with us can you?],
>>
>> Sure Richard, I'm still listening in on this thread; I'm now thinking about
>> a 518KHz Gaussian antenna... :0)
>>
[..]
>>
>
> Dirk I suspect the feed point impedance of your antenna is less than 1 ohm at
> 518Khz. This make a good ground imperative. With just a couple of ground rods
> for a ground I suspect your ground impedance is probably around 20 ohms for
> 60hz and considerably higher for RF. Putting in 120 radials 1/4wl long would
> be a tall order but perhaps you could add 20 or so as long as you can.
>
>
> Jimmie

Thanks for the info, Jimmie, but installing radials of that size is
simply impossible in my garden.
I guess I'll have to accept it...

73's - Dirk

1797. Re: #4, #6 & #8 aluminum ground wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 11:12:57 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <pqfss4-5nm.ln1@p400bob.personal.cox.net>
Source record: 35978

Lowes where I live (E Texas), sells AWG6 copper wire for electrical ground connections in 25ft rolls and off the spool by length. I think they also do a larger roll but I don't know the size.

Bob W5/VK2YQA

Bob Miller wrote:
>
> On Tue, 25 Sep 2007 18:36:00 -0700, John Smith
> <assemblywizard@gmail.com> wrote:
>
>> Anyone know of a good source?

1798. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 11:30:49 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1190892649.901664.271620@r29g2000hsg.googlegroups.com>
Source record: 35977

Wow, you guys are really smart...

1799. Re: Aerial grounding and QRM pick-up: theory & practice

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 12:30:59 UTC
From: Navtex-Fan <No@way.invalid>
Message-ID: <mn.db667d79c8b8e61e.59994@way.invalid>
Source record: 35979

On 2007-09-26, Richard Clark (67.168.144.41) wrote in
message <b9dlf31ne0hkikm65s6uu59tji39m0b37s@4ax.com>

> On Wed, 26 Sep 2007 19:13:44 GMT, Navtex-Fan <No@way.invalid> wrote:
>>> Not really - it may cast the problem into a different coupling
>>> mechanism. You still have capacitive coupling and you want to ground
>>> the smallest signal end (the antenna), not the load end (the
>>> receiver).
>>>
>>
>> Ehrm... that's exactly what I did. For a SWL, the antenna end is the
>> primary end :0)
>
> Hi Dirk,
>
> But you lifted the secondary ground and use the ground at the receiver
> end (if I understand your description). This creates a capacitive
> link into the front end through that long path. By the designation of
> UnUn, both sides (Pri/Sec) of the transformer go to ground. For low
> noise, this grounding should be at the antenna end of the transmission
> line (which re-introduces the possibility of ground loops if the
> receiver is also grounded). You also lose choking action (an UnUn or
> BalUn does not necessarily choke common mode currents).

Hi Richard,

I forgot to mention that I have also done the test with both windings
grounded. It didn't make any audible quality/QRM difference. (at least
not with the present weather/soil conditions)

>>
>> QRM levels were the same, very low to totally absent. Signal quality/
>> performance seems to be the same.
>
> Then, as the song from Oklahoma suggests, "you've gone about as far as
> you can go."
>

I guess so too... :0)

> A simple test is to tune off frequency to background noise (absolutely
> no signals). Remove the antenna, what happened to the noise level?
>

The noise level drops when the antenna is disconnected from the
receiver. (I'm using a Lowe HF-225 btw)

This is how the receiver sounds:
<http://users.pandora.be/dirk.claessens2/div/LoweHF225BGNoise.wav>

With the antenna connected, tuned on 518 KHz, no signal, it sounds like
this:
<http://users.pandora.be/dirk.claessens2/div/antenna_noise.wav>

Note that recordings were taken during daytime. At night, more static
is present usually.

>> I thought it was only possible to use a
>> antenna tuner at the receiver end when the antenna wire is directly
>> connected to the tuner, (that is: without using a coax line)
>> Right or wrong?
>
[long snip - but thanks for the thorough explanation, Richard]

> Power matching involves equalizing the source R to the load R and
> eliminating the source/load I through conjugation. This requires a
> tuner which supplies the necessary L for the excess C, or versa-vice
> (it is, of course, more complex that this, but this convenient short
> hand is sufficient to explore the topic).

I guess I have an old antenna tuner lying around somewhere on the
attic. I'm unsure if it will go as low as 518KHz. I'll have to check...

73's and thanks for the many tips - Dirk

1800. Chokes and QRN

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 13:00:48 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <2QNKi.16$JD3.14@newsfe12.lga>
Source record: 35980

I am getting ready to place a choke at the feedpoint of my half sloper, hoping to lower the noise level.

Question: would the same action help with a normal beam (a 3-element SteppIR, in this case)? I think there is a balun of some type in the driven element of the SteppIR, and I do not know how much this rejects noise pickup on the external shield of the coax. (The coaxes for both antennas run about 50' underground, and then about 60' up the tower.)

Bill - W2WO

1801. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 14:03:47 UTC
From: Dave <db5151@hotmail.com>
Message-ID: <13fne35nqq7aued@corp.supernews.com>
Source record: 35981

"Owen Duffy" <none@no.where> wrote in message
news:Xns99B450A2BC81Dnonenowhere@61.9.191.5...
> "Dave" <db5151@hotmail.com> wrote in
> news:13f6pjqgnk900a2@corp.supernews.com:
>
> ...
>> were easy to install. Seems I read somewhere that contrary to
>> conventional wisdom, the shield on a shielded loop doesn't actually
>> shield at all, but becomes the antenna element. Anyone know anything
>> about that line of thought? I obviously know nothing, and am trying
>> to learn. Just don't know where to focus my energies.
>
> I have written a simple explanation on the operation of the so called
> 'shielded loop' at http://www.vk1od.net/shieldedloop/index.htm .
>
> You may find the article of interest.
>
> If you read and understand the content of the article, you will see the
> pitfalls in using tape to 'shield' a loop.
>
> Owen

Hello Owen,

Sorry I am just now getting back to you on this, but I have been reading and studying your article. I constructed a loop somewhat like the one you discuss, but have one question: you speak of a "feed tee" from which the feedline extends. Should I be able to buy such a T-shaped device at my local parts outlet? I asked about such there one time, and was practically laughed at. But it seems such would be very handy for antenna builders of all types. If my local parts distributer doesn't have this item, where can I get it and what should I call it ("feed tee"?)

The loop I constructed is extremely primitive, but still functions nearly as well as the 110' longwire antenna I have used for years. And it is *directional*, though sometimes noisy (probably because the feedline does *not* exit and travel symmetrically away from the loop, I am guessing.)

The main way in which my loop differs from your design (other than the feedline asymmetry) is the fact that the shield is not cut away from the center conductor opposite the feed input. Can you tell me what function this feature serves?

Thanks for your help.

Dave

1802. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 14:21:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fdge97$6fl$1@news.albasani.net>
Source record: 35982

Denny wrote:
> Wow, you guys are really smart...

Thanks, coming from you, that is a real compliment, now isn't it? ;-)

Regards,
JS

1803. Re: #4, #6 & #8 aluminum ground wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 14:24:36 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fdgef6$6fl$2@news.albasani.net>
Source record: 35983

Bob Bob wrote:
> Lowes where I live (E Texas), sells AWG6 copper wire for electrical
> ground connections in 25ft rolls and off the spool by length. I think
> they also do a larger roll but I don't know the size.

Bob:

Yeah, that is what I broke down and bought to use.

I exhausted all outlets here and in the yellow pages. I will keep
looking though ...

Regards,
JS

1804. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 14:30:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <v9fnf3t02k65bijbtlkf3djasus2fqao6k@4ax.com>
Source record: 35984

On Thu, 27 Sep 2007 09:03:47 -0500, "Dave" <db5151@hotmail.com> wrote:

>The main way in which my loop differs from your design (other than the
>feedline asymmetry) is the fact that the shield is not cut away from the
>center conductor opposite the feed input. Can you tell me what function
>this feature serves?

Hi Dave,

It means there's a cognitive slip between you and Owen (and what is generally constructed as a "shielded loop").

The cut-away is the feedpoint of the antenna. The two semicircular sides extending away from it are the dipole arms (or the complete loop, if you prefer), and the join with trailing feedline is just that.

You would do well to more completely describe your differences as an open must exist somewhere in the shield (yes, an irony for what is called a "shielded loop") for it to work as an antenna.

73's
Richard Clark, KB7QHC

1805. Re: Chokes and QRN

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 14:36:31 UTC
From: Danny Richardson <>
Message-ID: <kufnf3pt5f64p7jrkivd8043pkaaikpqul@4ax.com>
Source record: 35985

On Thu, 27 Sep 2007 09:00:48 -0400, "Bill Ogden"
<wogden@attglobal.net> wrote:

>I am getting ready to place a choke at the feedpoint of my half sloper,
>hoping to lower the noise level.
>
>Question: would the same action help with a normal beam (a 3-element
>SteppIR, in this case)? I think there is a balun of some type in the driven
>element of the SteppIR, and I do not know how much this rejects noise pickup
>on the external shield of the coax. (The coaxes for both antennas run about
>50' underground, and then about 60' up the tower.)
>
>Bill - W2WO
>

http://audiosystemsgroup.com/RFI-Ham.pdf

1806. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 14:45:52 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <ccgnf3h36u9hhthn2u07ail45rb8dbila5@4ax.com>
Source record: 35986

On Sun, 23 Sep 2007 12:46:30 -0400, "Rick (W-A-one-R-K-T)"
<get.my.email@from.qrz.com> wrote:

>
>I just read the following on one of the mailing lists I subscribe to:
>
>"Quarter wave ground mounted radials are a waste of wire and a hold over
>from the olden days. Check the antenna handbook, the new philosophy is
>more and shorter. The thing is that the bulk of the energy from the
>vertical antenna is near the base of the antenna and this is what you are
>trying to capture. A quarter wave radial sounds logical but the planet
>will detune it so a quarter wave means nothing to the current."
>
>What say you all?
>
Read this and see if you really want to know more.

http://www.bencher.com/pdfs/00361ZZV.pdf

A challenge to all you experts out there:
Can you find anything you disagree with in this document?

John Ferrell W8CCW
"Life is easier if you learn to
plow around the stumps"

1807. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 14:52:39 UTC
From: Dave <db5151@hotmail.com>
Message-ID: <13fnguor6at3k7a@corp.supernews.com>
Source record: 35987

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:v9fnf3t02k65bijbtlkf3djasus2fqao6k@4ax.com...
> On Thu, 27 Sep 2007 09:03:47 -0500, "Dave" <db5151@hotmail.com> wrote:
>
>>The main way in which my loop differs from your design (other than the
>>feedline asymmetry) is the fact that the shield is not cut away from the
>>center conductor opposite the feed input. Can you tell me what function
>>this feature serves?
>
> Hi Dave,
>
> It means there's a cognitive slip between you and Owen (and what is
> generally constructed as a "shielded loop").
>
> The cut-away is the feedpoint of the antenna. The two semicircular
> sides extending away from it are the dipole arms (or the complete
> loop, if you prefer), and the join with trailing feedline is just
> that.
>
> You would do well to more completely describe your differences as an
> open must exist somewhere in the shield (yes, an irony for what is
> called a "shielded loop") for it to work as an antenna.
>
> 73's
> Richard Clark, KB7QHC

Hey Richard,

Thanks for the quick reply.

When you say that the cutaway is the feedpont of the antenna, does that mean
it is where the received signal enters the antenna? And the feedline is
where it is carried to the receiver?

Many thanks,

Dave

1808. EZNEC - is there an easy way... SWR... ham-bands only?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 15:29:55 UTC
From: mcalhoun@ksu.edu
Message-ID: <fdgi9j$dtg@unix1.cc.ksu.edu>
Source record: 35988

I've been "playing" with W7EL's EZNEC a lot (it's downright ADDICTIVE!-),
mostly comparing all-band wire antennas I might be able to construct.

I know how to have it calculate SWR for, say, 3.5-29.7 MHz, but that
results in a really-dense and hard-to-see chart. Is there a way to
have EZNEC calculate SWR for JUST certain hambands withOUT showing
the non-ham-band parts of the spectrum.

For example, 3.5-4 AND 7-7.3 AND 14.0-14.35 AND ...
but NOT including 4-7 OR 7.3-14 OR 14.35-21 OR ....

--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
NRA Life Member & Certified Instructor for Rifle, Pistol, & Home Firearm Safety
Also Certified Instructor for the Kansas Concealed-Carry Handgun (CCH) license

1809. Re: #4, #6 & #8 aluminum ground wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 16:20:28 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <f0mnf3li0eckp2mi1k376q1lg14u5g75ev@4ax.com>
Source record: 35989

On Thu, 27 Sep 2007 07:24:36 -0700, John Smith
<assemblywizard@gmail.com> wrote:

>Bob Bob wrote:
>> Lowes where I live (E Texas), sells AWG6 copper wire for electrical
>> ground connections in 25ft rolls and off the spool by length. I think
>> they also do a larger roll but I don't know the size.
>
>Bob:
>
>Yeah, that is what I broke down and bought to use.
>
>I exhausted all outlets here and in the yellow pages. I will keep
>looking though ...
>
>Regards,
>JS

Googling "Aluminum Ground Wire" brings up a multitude of purveyors.

bob
k5qwg

1810. Re: #4, #6 & #8 aluminum ground wire?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 17:10:20 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fdgo5s$1a0k$1@f04n12.cac.psu.edu>
Source record: 35890

John Smith wrote:
> Bob Bob wrote:
>> Lowes where I live (E Texas), sells AWG6 copper wire for electrical
>> ground connections in 25ft rolls and off the spool by length. I think
>> they also do a larger roll but I don't know the size.
>
> Bob:
>
> Yeah, that is what I broke down and bought to use.
>
> I exhausted all outlets here and in the yellow pages. I will keep
> looking though ...

Maybe a farm supply store might have AL wire?

- 73 de Mike KB3EIA -

1811. Re: EZNEC - is there an easy way... SWR... ham-bands only?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 17:20:20 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <oDRKi.2$hr1.0@trnddc02>
Source record: 35891

<mcalhoun@ksu.edu> wrote in message news:fdgi9j$dtg@unix1.cc.ksu.edu...
> I've been "playing" with W7EL's EZNEC a lot (it's downright ADDICTIVE!-),
> mostly comparing all-band wire antennas I might be able to construct.
>
> I know how to have it calculate SWR for, say, 3.5-29.7 MHz, but that
> results in a really-dense and hard-to-see chart. Is there a way to
> have EZNEC calculate SWR for JUST certain hambands withOUT showing
> the non-ham-band parts of the spectrum.
>
> For example, 3.5-4 AND 7-7.3 AND 14.0-14.35 AND ...
> but NOT including 4-7 OR 7.3-14 OR 14.35-21 OR ....
>
> --
> --Myron A. Calhoun.

Hi Myron

You've made me curious. Why do you not want to make as many VSWR charts
as you have "Bands" of interest?
You surely realize that you can record the VSWR curve of each band
individually then save them on all on one page somewhere in your computer.

I have learned things about antennas by recording (on one document) many
radiation patterns with the antenna height above ground changing slightly
between plots. When I scroll thru the plots it almost looks like a moving
picture.

I sure agree with you about the fun you can have with that EZNEC.

Jerry

1812. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 17:21:52 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <85OdnXPCg7Zxe2bbnZ2dneKdnZydnZ2d@bt.com>
Source record: 35892

"John Ferrell" <johnferrell@sprintmail.com> wrote in message
news:ccgnf3h36u9hhthn2u07ail45rb8dbila5@4ax.com...
> On Sun, 23 Sep 2007 12:46:30 -0400, "Rick (W-A-one-R-K-T)"
> <get.my.email@from.qrz.com> wrote:
>
>>
>>I just read the following on one of the mailing lists I subscribe to:
>>
>>"Quarter wave ground mounted radials are a waste of wire and a hold over
>>from the olden days. Check the antenna handbook, the new philosophy is
>>more and shorter. The thing is that the bulk of the energy from the
>>vertical antenna is near the base of the antenna and this is what you are
>>trying to capture. A quarter wave radial sounds logical but the planet
>>will detune it so a quarter wave means nothing to the current."
>>
>>What say you all?
>>
> Read this and see if you really want to know more.
>
> http://www.bencher.com/pdfs/00361ZZV.pdf
>
> A challenge to all you experts out there:
> Can you find anything you disagree with in this document?
>
> John Ferrell W8CCW
> "Life is easier if you learn to
> plow around the stumps"

An excellent reference John. All nicely explained and with pictures. :-)
Mike G0ULI

1813. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 18:03:39 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99B92944013A9nonenowhere@61.9.191.5>
Source record: 35893

"Dave" <db5151@hotmail.com> wrote in
news:13fne35nqq7aued@corp.supernews.com:

...
> Hello Owen,
>
> Sorry I am just now getting back to you on this, but I have been
> reading and studying your article. I constructed a loop somewhat like
> the one you discuss, but have one question: you speak of a "feed tee"
> from which the feedline extends. Should I be able to buy such a
> T-shaped device at my local parts outlet? I asked about such there
> one time, and was practically laughed at. But it seems such would be
> very handy for antenna builders of all types. If my local parts
> distributer doesn't have this item, where can I get it and what should
> I call it ("feed tee"?)

Dave, the 'feed tee' I refer to is the tee at the bottom of Fig 1. It is not a standard component that you would buy off the shelf. I have used it as a descriptive term, sorry if it has confused you. The important detail is the electrical detail. In commercial loop constructions, the thing is usually a box, the the loop coax enters opposite sides of the box with effective circumfrential shielding. The box is a convenient mounting and good location for an amplifier if used.

>
> The loop I constructed is extremely primitive, but still functions
> nearly as well as the 110' longwire antenna I have used for years.
> And it is *directional*, though sometimes noisy (probably because the
> feedline does *not* exit and travel symmetrically away from the loop,
> I am guessing.)

I am not suggesting that loops aren't directional. Shielding a loop is one (and only one of several) of maximising the pattern nulls.

Symmetry helps to ensure that the feedline is not effectively part of the system radiator.

The noise issue may be related to the above.

>
> The main way in which my loop differs from your design (other than the
> feedline asymmetry) is the fact that the shield is not cut away from
> the center conductor opposite the feed input. Can you tell me what
> function this feature serves?

I don't understand just what you mean. Perhaps your construction is like Fig 3 (from the ARRL Antenna Handbook), but as stated, it doesn't do what

they say it does. That is not to say it doesn't 'work', or that it isn't directional. The stuff about shielding against electric and not magnetic fields is a flawed explanation.

The real radiator is the outside of the outer conductor, the feedpoint is the gap, and the construction is a clever way of achieving maximum symmetry by placing the feedpoint at the top and routing the coax to the feedpoint in a way that is symmetrical with respect to the outside of the outer conductor of the loop. If you don't route the coax away from the tee in a very symmetrical way, don't waste your time on the complicated construction.

Owen

1814. Mobile balun thoughts

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 18:42:30 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fdgtiu$1im2$1@f04n12.cac.psu.edu>
Source record: 35894

I'm almost finished installing a bugcatcher antenna on my Vitara mini SUV.

I'm using a GLA 480 coil, 4 foot stainless bottom mast, and either 60 inches of AL top whip or a similar SS whip. I'll use a 12 to 16 inch cap hat on top of the whip

Should I put a 1:1 balun on the setup or not?

- 73 de Mike KB3EIa -

1815. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 19:49:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <7j1of3tau7vl28ufv5sfj48gatlskk0arq@4ax.com>
Source record: 35895

On Thu, 27 Sep 2007 09:52:39 -0500, "Dave" <db5151@hotmail.com> wrote:

>When you say that the cutaway is the feedpont of the antenna, does that mean
>it is where the received signal enters the antenna? And the feedline is
>where it is carried to the receiver?

Hi Dave,

The single turn, shorted loop with an open shield is merely a
convenient construction. It brings nothing new to the table of RF.

Owen's page pretty much describes it all, but there's always the
off-chance it needs to be said again.

The gap is the feedpoint driving your transmission line.

The gap and driveline drop must be at the points shown for symmetry to
insure balance.

Shielding does nothing but describe a balance. You can as easily
remove the shield and obtain identical performance IF you guarantee
balance. This was done for decades before coaxial cable was common.

The gap, the short, and the shield all lend the aura of "magic" to an
otherwise conventional loop. Being "magic" gives rise to ridiculous
claims applied to it. Being "magic" divorces logic from the design.
That loss of logic begins to migrate among the "magic" crowd such that
they come up with useless antennas.

73's
Richard Clark, KB7QHC

1816. Re: Mobile balun thoughts

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 19:57:27 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gc2of3lmh3hb4cdjboetgbvd5tiopn3l9h@4ax.com>
Source record: 35896

On Thu, 27 Sep 2007 14:42:30 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

>Should I put a 1:1 balun on the setup or not?

Hi Mike,

RF in the cab will keep you awake during long night drives. Just sit
on the mike enough that if you start to nod off, it fires up the rig
and the seat of your pants both.

Seriously, asking this one question only opens Pandora's box to all
the ways RF leakage and common mode can stop you dead in the road
(blame modern automotive technology). Your mini SUV is the major
radiator, the "antenna" is merely a tuned radial. There are some
elements of a Faraday cage here, but there are also elements of where
the cage fails, so does your control of RF in the cab, under the hood,
in the glove box, what-have-you.

73's
Richard Clark, KB7QHC

1817. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 20:30:15 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99B9421E8FD57nonenowhere@61.9.191.5>
Source record: 35897

Richard Clark <kb7qhc@comcast.net> wrote in
news:7j1of3tau7vl28ufv5sfj48gatlskk0arq@4ax.com:

> Shielding does nothing but describe a balance. You can as easily
> remove the shield and obtain identical performance IF you guarantee
> balance. This was done for decades before coaxial cable was common.

Hi Richard,

For Dave's benefit, I might explain that the risk attendent in using a small loop on a long transmission line is that the outside of the transmission line becomes a significant radiator. In the limit, the loop becomes just a means of exciting the outside of the transmission line as the main element of the antenna system.

That is often undesirable because it spoils the pattern and / or results in pickup of undesirable signals, especially from sources close to the transmission line that has become the antenna.

There are other methods of trying to isolate the transmission line (as Richard noted), the shielded loop construction is not the only way. For example, a BALUN is a device that is designed to permit transition from an balance device (the loop) to an unbalanced device (a coaxial transmission line).

The shielded loop is widely used for instrumentation purposes, where the Antenna Factor (related to gain) is calibrated and needs to be independent of feedline length and routing (within reason).

Owen

1818. Re: Chokes and QRN

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 20:59:37 UTC
From: Wimpie <wimtel@tetech.nl>
Message-ID: <1190926777.541899.63460@19g2000hsx.googlegroups.com>
Source record: 35898

On 27 sep, 15:00, "Bill Ogden" <wog...@attglobal.net> wrote:
> I am getting ready to place a choke at the feedpoint of my half sloper,
> hoping to lower the noise level.
>
> Question: would the same action help with a normal beam (a 3-element
> SteppIR, in this case)? I think there is a balun of some type in the driven
> element of the SteppIR, and I do not know how much this rejects noise pickup
> on the external shield of the coax. (The coaxes for both antennas run about
> 50' underground, and then about 60' up the tower.)
>
> Bill - W2WO

Hello Bill,

Assuming a good balun, feeder in symmetry plane of beam and the 50"
under ground, I do not expect much off it.

Also when there would be noise climbing up the feeder (to the beam),
the noise could also use the (metal) mast.

You might place a signal source at your location close the coaxial
feeder. Add some common mode rejection and see whether it works. You
should source ferrite material with the highest impedance at the
working frequency.

Best regards,

Wim
PA3DJS

1819. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 21:55:48 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1190930148.034576.279310@w3g2000hsg.googlegroups.com>
Source record: 35899

On Sep 26, 9:56 am, "Wayne" <mygarbage...@verizon.net> wrote:
> "Nate Bargmann" <n0nb.DO.NOT.S...@ME.networksplus.net> wrote in message
>
> news:pan.2007.09.25.21.53.07@ME.networksplus.net...
>
> > On Sun, 23 Sep 2007 12:59:49 -0500, Richard Fry wrote:
>
> >> "Rick wrote>
>
> >>> ... What say you all?
>
> >> Read "Ground Systems as a Factor in Antenna Efficiency" by Brown, Lewis
> >> & Epstein of RCA Labs, published in the June, 1937 issue of The
> >> Proceedings of the I.R.E.
>
> >> It proves otherwise.
>
> > Honest question, does it matter whether the objective is a strong ground
> > wave as in AM broadcast or skywave as in amateur operation?
>
> > I am installing a Hustler 4BTV this fall and have put down (so far) 16
> > radials that range from about 18 to 35 feet in length due to my servere
> > space restrictions. I may add 16 more later this fall as an experiment.
>
> > 73, de Nate >>
>
> It would be interesting to follow the change in VSWR as you add individual
> radials. Some years ago, there was a discussion of adding radials until the
> VSWR stopped increasing. This was based on an expected feedpoint resistance
> of 36 ohms, and an assumption that the ground losses were 15 ohms or less.
> So at the worst case, the VSWR was near 1:1. The best case, with a ground
> loss approaching 0 ohms, would have a VSWR of 50/36= 1.39:1.
>
> I want to attribute the original discussion to W2DU, but I stop short of
> that, in case I don't remember correctly.

I think it would be a lot MORE interesting to follow the change in
impedance as you add wires. I can see a lot that can go wrong with
"adding radials till the SWR stops increasing." I don't think that
the case of 33 ohms ground resistance is one to seriously consider*,
but if you're operating over really poor ground and/or your "quarter
wave" antenna isn't really a quarter electrical wave, you may see
significant reactive component that you'll never resolve with an SWR
meter. You'll likely get very confused by it instead.

*What's the "ground resistance" with as few as two radials, even if there's no earth ground nearby? What if there are no radials but the ground is really awful? Some "what-ifs" with EZNEC or the like can give you an appreciation for what happens...

Cheers,
Tom

1820. Re: Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 22:10:44 UTC
From: merlin-7 <merlin-7@sc.rr.com>
Message-ID: <46fc2aea$0$17129$4c368faf@roadrunner.com>
Source record: 35900

"John Smith" <assemblywizard@gmail.com> wrote in message
news:fdfg41$gn1$1@news.albasani.net...
> Jerry Martes wrote:
>
> > I am mainly interested in expanding my understanding of antennas and
> > terminology. My first thought was that there is a way of measuring
power
> > that I didnt know about, but everyone else does understand. Since you
> > arent familiar with the meaning of DC when associated with 144 MHz
antenna
> > power handling, I am comfortable not knowing either.
> >
> > Thanks
> > Jerry
> >
>
>
All I can tell you is,

I bought one for my truck connected to a yaesu ft-2800m, 65 watts.

Me and another ham were supporting a bike ride and were posted at a fire station, out in the middle of nowhere.The other ham had his rig and a j-pole that he ran up the fire stations flag pole..25feet high or so.
We ended up using my rig. Much better performance over all.In a steak hole mount in the bed of my truck.
I liked the antenna so much that I use another one for my base station.
It will take massive abuse, tree limbs at 60mph on the whip part of the antenna etc.

It will run all of the 2 meter band with very little loss.

I do however like antennas that use a lot of wire, the more wire in the sky, the more area you have to pull in those weak signals. that is as long as it is done right and lakeview has got this one right!!

I have no interest or personal gain by posting this, I just know a good product after I have used it for several years in the field and used it in the worst conditions possible. AKA 2 days after hurricane Katrina in Mississippi and trust me that antenna hit many a tree branch and a few other things on my trips thru hurricane damaged areas.

Sorry, (I got on a rant)

1821. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 22:52:01 UTC
From: Nate Bargmann <n0nb.DO.NOT.SPAM@ME.networksplus.net>
Message-ID: <pan.2007.09.27.22.52.00@ME.networksplus.net>
Source record: 35901

On Wed, 26 Sep 2007 11:33:02 -0700, Jim Kelley wrote:

> John Smith wrote:
>> Perhaps?
>>
>> "As far as the laws of mathematics refer to reality, they are not
>> certain; as far as they are certain, they do not refer to
>> reality."--Albert Einstein
>>
>> And, I humbly propose:
>>
>> "Too often, the ignorant are quick to conceal their ignorance in
>> complexity not well grasped by common men."--John Smith
>
> I think that's true. I like it.
>
> I like this one too:
>
> "He who knows, does not speak. He who speaks, does not know."

By that metric, the Internet has gotten less intelligent as it grew.

Who knew?

73, de Nate >>

--

"The optimist proclaims that we live in the best of all possible worlds,
the pessimist fears this is true."

1822. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 23:19:41 UTC
From: Dave <db5151@hotmail.com>
Message-ID: <13foelh53o35sfa@corp.supernews.com>
Source record: 35902

"Owen Duffy" <none@no.where> wrote in message
news:Xns99B92944013A9nonenowhere@61.9.191.5...
> "Dave" <db5151@hotmail.com> wrote in
> news:13fne35nqq7aued@corp.supernews.com:
>
> ...
>> Hello Owen,
>>
>> Sorry I am just now getting back to you on this, but I have been
>> reading and studying your article. I constructed a loop somewhat like
>> the one you discuss, but have one question: you speak of a "feed tee"
>> from which the feedline extends. Should I be able to buy such a
>> T-shaped device at my local parts outlet? I asked about such there
>> one time, and was practically laughed at. But it seems such would be
>> very handy for antenna builders of all types. If my local parts
>> distributer doesn't have this item, where can I get it and what should
>> I call it ("feed tee"?)
>
> Dave, the 'feed tee' I refer to is the tee at the bottom of Fig 1. It is
> not a standard component that you would buy off the shelf. I have used it
> as a descriptive term, sorry if it has confused you. The important detail
> is the electrical detail. In commercial loop constructions, the thing is
> usually a box, the the loop coax enters opposite sides of the box with
> effective circumfrential shielding. The box is a convenient mounting and
> good location for an amplifier if used.
>
>>
>> The loop I constructed is extremely primitive, but still functions
>> nearly as well as the 110' longwire antenna I have used for years.
>> And it is *directional*, though sometimes noisy (probably because the
>> feedline does *not* exit and travel symmetrically away from the loop,
>> I am guessing.)
>
> I am not suggesting that loops aren't directional. Shielding a loop is
> one (and only one of several) of maximising the pattern nulls.
>
> Symmetry helps to ensure that the feedline is not effectively part of the
> system radiator.
>
> The noise issue may be related to the above.
>
>>
>> The main way in which my loop differs from your design (other than the
>> feedline asymmetry) is the fact that the shield is not cut away from

>> the center conductor opposite the feed input. Can you tell me what
>> function this feature serves?
>
> I don't understand just what you mean. Perhaps your construction is like
> Fig 3 (from the ARRL Antenna Handbook), but as stated, it doesn't do what
> they say it does. That is not to say it doesn't 'work', or that it isn't
> directional. The stuff about shielding against electric and not magnetic
> fields is a flawed explanation.
>
> The real radiator is the outside of the outer conductor, the feedpoint is
> the gap, and the construction is a clever way of achieving maximum
> symmetry by placing the feedpoint at the top and routing the coax to the
> feedpoint in a way that is symmetrical with respect to the outside of the
> outer conductor of the loop. If you don't route the coax away from the
> tee in a very symmetrical way, don't waste your time on the complicated
> construction.
>
> Owen

Hey Owen,

I am unclear on the use of the term "feedpoint" to describe the exposed center conductor of the coax. Can you give me a little more detail as to what this means? Sorry, I just don't understand why it is called the feedpoint. I somehow thought that was where the coax connecting the antenna to the receiver/transmitter was attached. And just for the record, I am only going to be receiving with whatever type of loop I end up with. What I am actually seeking is a small loop that I can attach to my tunable RF amplifier for feeding enhanced signal to my Sony 7600GR shortwave radio, making a portable unit to pair with the radio, allowing me to set them both up wherever I wish.

Oh, and the primitive loop I currently have is a piece of coax forming an (approx) 18" loop, with the center conductor connected to the outer shield and none of the shield cut away.

Thanks again for your help...

Dave

1823. Re: Mobile balun thoughts

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 23:23:13 UTC
From: Larry Benko <xxw0qe@comcast.net>
Message-ID: <o9WdncadbILDpmHbnZ2dnUVZ_gydnZ2d@comcast.com>
Source record: 35903

Michael Coslo wrote:

> Should I put a 1:1 balun on the setup or not?
>
> - 73 de Mike KB3EIa -

Mike,

I'm sure there are a lot of opinions but here is what I do. Assuming your mobile antenna is pretty well matched and you are running 100W then the differential current in the coax will be about 1.4A. I have an industrial clamp-on current probe that connects to a small battery powered RF power meter (you can use something else) and I would measure the common mode current on the shield of the coax. If the common mode current was greater than 10% of the differential current in the coax (0.14A) on any band of interest then I would use a good quality 1:1 balun. Why 10%? I have no real reason but I have done many mobile installations and have nearly 30K mobile qso's and have no equipment interactions or problems.

Obviously if the common mode current is minuscule then there no value in having a balun. Also using a balun will do no harm and only cost you a fraction of a dB. in loss.

73,
Larry, W0QE

1824. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-27 23:36:02 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99B9619E315A8nonenowhere@61.9.191.5>
Source record: 35904

```
"Dave" <db5151@hotmail.com> wrote in
news:13foelh53o35sfa@corp.supernews.com:

>
> "Owen Duffy" <none@no.where> wrote in message
> news:Xns99B92944013A9nonenowhere@61.9.191.5...
>> "Dave" <db5151@hotmail.com> wrote in
>> news:13fne35nqq7aued@corp.supernews.com:
>>
>> ...
>>> Hello Owen,
>>>
>>> Sorry I am just now getting back to you on this, but I have been
>>> reading and studying your article. I constructed a loop somewhat
>>> like the one you discuss, but have one question: you speak of a
>>> "feed tee" from which the feedline extends. Should I be able to buy
>>> such a T-shaped device at my local parts outlet? I asked about such
>>> there one time, and was practically laughed at. But it seems such
>>> would be very handy for antenna builders of all types. If my local
>>> parts distributer doesn't have this item, where can I get it and
>>> what should I call it ("feed tee"?)
>>
>> Dave, the 'feed tee' I refer to is the tee at the bottom of Fig 1. It
>> is not a standard component that you would buy off the shelf. I have
>> used it as a descriptive term, sorry if it has confused you. The
>> important detail is the electrical detail. In commercial loop
>> constructions, the thing is usually a box, the the loop coax enters
>> opposite sides of the box with effective circumfrential shielding.
>> The box is a convenient mounting and good location for an amplifier
>> if used.
>>
>>>
>>> The loop I constructed is extremely primitive, but still functions
>>> nearly as well as the 110' longwire antenna I have used for years.
>>> And it is *directional*, though sometimes noisy (probably because
>>> the feedline does *not* exit and travel symmetrically away from the
>>> loop, I am guessing.)
>>
>> I am not suggesting that loops aren't directional. Shielding a loop
>> is one (and only one of several) of maximising the pattern nulls.
>>
>> Symmetry helps to ensure that the feedline is not effectively part of
>> the system radiator.
>>
```

>> The noise issue may be related to the above.
>>
>>>
>>> The main way in which my loop differs from your design (other than
>>> the feedline asymmetry) is the fact that the shield is not cut away
>>> from the center conductor opposite the feed input. Can you tell me
>>> what function this feature serves?
>>
>> I don't understand just what you mean. Perhaps your construction is
>> like Fig 3 (from the ARRL Antenna Handbook), but as stated, it
>> doesn't do what they say it does. That is not to say it doesn't
>> 'work', or that it isn't directional. The stuff about shielding
>> against electric and not magnetic fields is a flawed explanation.
>>
>> The real radiator is the outside of the outer conductor, the
>> feedpoint is the gap, and the construction is a clever way of
>> achieving maximum symmetry by placing the feedpoint at the top and
>> routing the coax to the feedpoint in a way that is symmetrical with
>> respect to the outside of the outer conductor of the loop. If you
>> don't route the coax away from the tee in a very symmetrical way,
>> don't waste your time on the complicated construction.
>>
>> Owen
>
> Hey Owen,
>
> I am unclear on the use of the term "feedpoint" to describe the
> exposed center conductor of the coax. Can you give me a little more
> detail as to what this means? Sorry, I just don't understand why it
> is called the feedpoint. I somehow thought that was where the coax
> connecting the antenna to the receiver/transmitter was attached. And

I have used the term feedpoint to denote the point that delimits the role
of the transmission line and the radiator.

> just for the record, I am only going to be receiving with whatever
> type of loop I end up with. What I am actually seeking is a small

Ok, but broady speaking, the effects that apply to considering the antenna
with a tranmsmitter also apply to using it as a receiver.

If you want to think in receive terms, your coax feed line may have RF
currents induced on the outside of it from local and distant sources, and
if at the tee at the bottom of the loop, that current divides equally into
both halves of the loop, it will not result in a voltage difference at the
gap. The current will only divide to equally if each side of the loop is
symmetrical to the feed line and everything else near to it.

> loop that I can attach to my tunable RF amplifier for feeding enhanced
> signal to my Sony 7600GR shortwave radio, making a portable unit to
> pair with the radio, allowing me to set them both up wherever I wish.
>

> Oh, and the primitive loop I currently have is a piece of coax forming
> an (approx) 18" loop, with the center conductor connected to the outer
> shield and none of the shield cut away.

Again, I think you are describing the loop shown in Fig 3 of my article. You don't need to use coax for the loop itself, it is not a balanced loop as described and coax doesn't help with balance. If it was you intention that the loop was not susceptible to pickup on the feedline, the antenna you describe does nothing to prevent that. The shielding explanation for that type of loop is bunk.

Owen

1825. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 00:48:52 UTC
From: Dave <db5151@hotmail.com>
Message-ID: <13fojsppp7i1r16@corp.supernews.com>
Source record: 35905

```
"Owen Duffy" <none@no.where> wrote in message
news:Xns99B9619E315A8nonenowhere@61.9.191.5...
> "Dave" <db5151@hotmail.com> wrote in
> news:13foelh53o35sfa@corp.supernews.com:
>
>>
>> "Owen Duffy" <none@no.where> wrote in message
>> news:Xns99B92944013A9nonenowhere@61.9.191.5...
>>> "Dave" <db5151@hotmail.com> wrote in
>>> news:13fne35nqq7aued@corp.supernews.com:
>>>
>>> ...
>>>> Hello Owen,
>>>>
>>>> Sorry I am just now getting back to you on this, but I have been
>>>> reading and studying your article. I constructed a loop somewhat
>>>> like the one you discuss, but have one question: you speak of a
>>>> "feed tee" from which the feedline extends. Should I be able to buy
>>>> such a T-shaped device at my local parts outlet? I asked about such
>>>> there one time, and was practically laughed at. But it seems such
>>>> would be very handy for antenna builders of all types. If my local
>>>> parts distributer doesn't have this item, where can I get it and
>>>> what should I call it ("feed tee"?)
>>>
>>> Dave, the 'feed tee' I refer to is the tee at the bottom of Fig 1. It
>>> is not a standard component that you would buy off the shelf. I have
>>> used it as a descriptive term, sorry if it has confused you. The
>>> important detail is the electrical detail. In commercial loop
>>> constructions, the thing is usually a box, the the loop coax enters
>>> opposite sides of the box with effective circumfrential shielding.
>>> The box is a convenient mounting and good location for an amplifier
>>> if used.
>>>
>>>>
>>>> The loop I constructed is extremely primitive, but still functions
>>>> nearly as well as the 110' longwire antenna I have used for years.
>>>> And it is *directional*, though sometimes noisy (probably because
>>>> the feedline does *not* exit and travel symmetrically away from the
>>>> loop, I am guessing.)
>>>
>>> I am not suggesting that loops aren't directional. Shielding a loop
>>> is one (and only one of several) of maximising the pattern nulls.
>>>
>>> Symmetry helps to ensure that the feedline is not effectively part of
```

>>> the system radiator.
>>>
>>> The noise issue may be related to the above.
>>>
>>>>
>>>> The main way in which my loop differs from your design (other than
>>>> the feedline asymmetry) is the fact that the shield is not cut away
>>>> from the center conductor opposite the feed input. Can you tell me
>>>> what function this feature serves?
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>>> like Fig 3 (from the ARRL Antenna Handbook), but as stated, it
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>>> 'work', or that it isn't directional. The stuff about shielding
>>> against electric and not magnetic fields is a flawed explanation.
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>>> feedpoint is the gap, and the construction is a clever way of
>>> achieving maximum symmetry by placing the feedpoint at the top and
>>> routing the coax to the feedpoint in a way that is symmetrical with
>>> respect to the outside of the outer conductor of the loop. If you
>>> don't route the coax away from the tee in a very symmetrical way,
>>> don't waste your time on the complicated construction.
>>>
>>> Owen
>>
>> Hey Owen,
>>
>> I am unclear on the use of the term "feedpoint" to describe the
>> exposed center conductor of the coax. Can you give me a little more
>> detail as to what this means? Sorry, I just don't understand why it
>> is called the feedpoint. I somehow thought that was where the coax
>> connecting the antenna to the receiver/transmitter was attached. And
>
> I have used the term feedpoint to denote the point that delimits the role
> of the transmission line and the radiator.
>
>> just for the record, I am only going to be receiving with whatever
>> type of loop I end up with. What I am actually seeking is a small
>
> Ok, but broady speaking, the effects that apply to considering the antenna
> with a tranmsmitter also apply to using it as a receiver.
>
> If you want to think in receive terms, your coax feed line may have RF
> currents induced on the outside of it from local and distant sources, and
> if at the tee at the bottom of the loop, that current divides equally into
> both halves of the loop, it will not result in a voltage difference at the
> gap. The current will only divide to equally if each side of the loop is
> symmetrical to the feed line and everything else near to it.
>

>> loop that I can attach to my tunable RF amplifier for feeding enhanced
>> signal to my Sony 7600GR shortwave radio, making a portable unit to
>> pair with the radio, allowing me to set them both up wherever I wish.
>>
>> Oh, and the primitive loop I currently have is a piece of coax forming
>> an (approx) 18" loop, with the center conductor connected to the outer
>> shield and none of the shield cut away.
>
> Again, I think you are describing the loop shown in Fig 3 of my article.
> You don't need to use coax for the loop itself, it is not a balanced loop
> as described and coax doesn't help with balance. If it was you intention
> that the loop was not susceptible to pickup on the feedline, the antenna
> you describe does nothing to prevent that. The shielding explanation for
> that type of loop is bunk.
>
>
> Owen

Okay, well, all I am trying to do is build something that will pick up weak signals from a given direction, while ignoring signals and noise from other directions. Ideally, it would not introduce a great deal of noise from any source (unlike the loop I currently am experimenting with.) I am not overly enamored of complex designs, and don't really care what it looks like so long as it meets the above criteria. Do you know of any fairly simple designs that would meet this description? If tuning is possible, that would be a plus.

Thanks,

Dave

1826. Re: Mobile balun thoughts

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 01:21:38 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns99B8D98023FC9mcoslocomcastnet@216.196.97.136>
Source record: 35906

Richard Clark <kb7qhc@comcast.net> wrote in
news:gc2of3lmh3hb4cdjboetgbvd5tiopn3l9h@4ax.com:

> On Thu, 27 Sep 2007 14:42:30 -0400, Michael Coslo <mjc5@psu.edu>
> wrote:
>
>>Should I put a 1:1 balun on the setup or not?
>
> Hi Mike,
>
> RF in the cab will keep you awake during long night drives. Just sit
> on the mike enough that if you start to nod off, it fires up the rig
> and the seat of your pants both.

Would encourage me to shower more than once a day too...

> Seriously, asking this one question only opens Pandora's box to all
> the ways RF leakage and common mode can stop you dead in the road
> (blame modern automotive technology). Your mini SUV is the major
> radiator, the "antenna" is merely a tuned radial. There are some
> elements of a Faraday cage here, but there are also elements of where
> the cage fails, so does your control of RF in the cab, under the hood,
> in the glove box, what-have-you.

I suppose that I could try with and without,and just find out.
There is at least one 2 meter Frequency that kicks me out of overdrive.
Fortunately it is on a repeater that I only use when out of town.

- 73 de Mike KB3EIA

1827. Re: Mobile balun thoughts

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 01:25:06 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns99B8DA16CEC7mcoslocomcastnet@216.196.97.136>
Source record: 35907

Larry Benko <xxw0qe@comcast.net> wrote in
news:o9WdncadbILDpmHbnZ2dnUVZ_gydnZ2d@comcast.com:

> Obviously if the common mode current is minuscule then there no value in
> having a balun. Also using a balun will do no harm and only cost you a
> fraction of a dB. in loss.

I'll give both ways a try and see what happens.

I forgot to mention that under Richard's mic sitting technique (in his
last post) that I would have to make sure to avoid eating at Taco Bell,
then accidentally leaving VOX on while driving.......

- 73 de Mike KB3EIA -

1828. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 01:29:11 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99B974CCF9B9nonenowhere@61.9.191.5>
Source record: 35908

"Dave" <db5151@hotmail.com> wrote in
news:13fojsppp7i1r16@corp.supernews.com:

> Okay, well, all I am trying to do is build something that will pick up
> weak signals from a given direction, while ignoring signals and noise
> from other directions. Ideally, it would not introduce a great deal
> of noise from any source (unlike the loop I currently am experimenting
> with.) I am not overly enamored of complex designs, and don't really
> care what it looks like so long as it meets the above criteria. Do
> you know of any fairly simple designs that would meet this
> description? If tuning is possible, that would be a plus.

For your MW RO application, I would look at a multi turn (unshielded)
loop, untuned or tuned, but with an effective balun isolating the outer
surface of the outer conductor of the coax feed line from the loop.

I responded originally to your question about shielded loops. Shielding
is only one way to improve loop balance, and most explanations of
shielded loops are flawed.

Google for some designs, and be suspicious of purported shielded loops.

BTW, loops have pattern symmetry about the plane of the loop, so they
don't favour signals from only one direction. Think of them more as
having two diametrically opposed narrow reject regions in the patter, the
two accept regions are much broader. If you want maximum rejection,
balance the loop wrt the feed line and everything else near it.

Owen

1829. Re: Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 01:37:24 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <lf2us4-08r.ln1@p400bob.personal.cox.net>
Source record: 35909

Hi Larry

Just a quick thought.

Since a moved from the marine band to 2m is down in freq you may get away with something you can slip over the marine whip to increase C to ground. I am thinking something loose here, not so much a metal to metal connection. Since there will be a greater effect at the top end maybe a piece of metal pipe just sitting close to the top, maybe buffered with a grommet or something to hold it in place.

Might be worth an experimenting if the 2m VSWR on the marine whip is beyond bounds!

Of course if you have the money to throw at it, mounting a high gain vertical on a steadicam mount might solve the movement induced pattern problems! <grin>

Cheers Bob VK2YQA

Larry wrote:

> I'll follow the link that Bob gave and see what the guy is using. I
> suppose I could disconnect the marine VHF antenna and hook it up to the
> ICOM and a SWR meter and see what I get. I guess I should give that a
> try. I don't need to do anything to try that.
>
> I know that I'd lose some of whatever gain those things claim, as the
> antenna would seldom be completely vertical, but I've never found that
> to be all that significant anyway. I just need to have an antenna which
> does not rely on a ground plane. Since I'm only fishing on lakes, I
> don't think that is all that significant anyway. I've found that marine
> VHF gets almost nowhere (nobody around) so I think I'd do better with 2
> meters.

1830. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 02:39:18 UTC
From: nm5k@wt.net
Message-ID: <1190947158.576194.237310@y42g2000hsy.googlegroups.com>
Source record: 35910

On Sep 27, 7:48 pm, "Dave" <db5...@hotmail.com> wrote:
>
>
> > Again, I think you are describing the loop shown in Fig 3 of my article.
> > You don't need to use coax for the loop itself, it is not a balanced loop
> > as described and coax doesn't help with balance. If it was you intention
> > that the loop was not susceptible to pickup on the feedline, the antenna
> > you describe does nothing to prevent that. The shielding explanation for
> > that type of loop is bunk.
>
> > Owen
>
> Okay, well, all I am trying to do is build something that will pick up weak
> signals from a given direction, while ignoring signals and noise from other
> directions. Ideally, it would not introduce a great deal of noise from any
> source (unlike the loop I currently am experimenting with.) I am not overly
> enamored of complex designs, and don't really care what it looks like so
> long as it meets the above criteria. Do you know of any fairly simple
> designs that would meet this description? If tuning is possible, that would
> be a plus.
>
> Thanks,
>
> Dave

One thing about small loops.. They are great at nulling ground wave
signals,
but not so great at nulling skywave signals.
So how well a small loop would work will depend on the source of the
noise.
If the source is local, IE: a noisy power line, etc, that signal will
arrive via
a space or ground wave, and you can null that noise very well.
But if the interference is via sky wave, you might get a reduction in
strength,
but usually not a total null.
As a general rule, small loops are best suited to the lower
frequencies.
They work ok for the HF bands, but you may not the see all the
benefits
on those bands that you might on the MW bands. But even one used
for HF should get a decent null on a noise signal as long as the
source
is fairly local.

As far as shielded loops, I've carefully compared both unshielded and shielded loops, and couldn't really tell a lick of difference as long as
both are balanced. I've also tried using unshielded loops, but with a shielded coupling loop. Again, no difference, as mine are fairly well balanced even using a regular unshielded solenoid loop.
I had just as deep nulls unshielded, as I did shielded.. No difference in perceived noise either. So I consider using shielded loops an option,
but usually not needed. As many have mentioned , the only advantage is to help ensure balance, and in most cases, it's not a problem to worry about.
I do mount everything very symmetrically though. I make mine with very simple PVC frames.
IE: one example... http://web.wt.net/~nm5k/loop5.jpg
But my big one is even more simple. Just a thick appx 2-3 inch PVC "mast", and regular 3/4 inch PVC for a cross arm, using PVC "Tees" at the ends to thread the wires through.
The 3/4 inch PVC crossarm is run through drilled holes in the larger PVC
mast. I drill them to fit tight, and I don't even have to glue them, although
thats an option. I use stands to mount the loops on, and they can be easily turned.
MK

1831. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 04:48:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13fp1sop0mtv286@corp.supernews.com>
Source record: 35911

Dave wrote:
>
> I am unclear on the use of the term "feedpoint" to describe the exposed
> center conductor of the coax. Can you give me a little more detail as to
> what this means? Sorry, I just don't understand why it is called the
> feedpoint. I somehow thought that was where the coax connecting the antenna
> to the receiver/transmitter was attached. And just for the record, I am
> only going to be receiving with whatever type of loop I end up with. What
> I am actually seeking is a small loop that I can attach to my tunable RF
> amplifier for feeding enhanced signal to my Sony 7600GR shortwave radio,
> making a portable unit to pair with the radio, allowing me to set them both
> up wherever I wish. . .

I might be able to shed a little more light on this.

If you directly feed an unshielded loop, you cut a gap in the loop and connect a transmission line across it. Current induced in the loop by a signal flows from the loop to the transmission line via this connection.

In a "shielded" loop, the signal induces a current on the outside of the "shield". At the gap, the current flows to the inside of the "shield" where it induces an equal and opposite current into the inner loop itself. The inside of the "shield" and the inner loop comprise an ordinary non-radiating coaxial transmission line, so it can be said that the gap is where the signal-induced current enters the transmission line, just like the gap in the unshielded loop. And so the gap in the "shielded" loop is a feedpoint in exactly the same sense as the gap in an unshielded loop.

Roy Lewallen, W7EL

1832. Re: EZNEC - is there an easy way... SWR... ham-bands only?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 04:52:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13fp23vfihhv209@corp.supernews.com>
Source record: 35912

Look up "Frequency Sweep, Input File" in the EZNEC manual index.

Roy Lewallen, W7EL

mcalhoun@ksu.edu wrote:
> I've been "playing" with W7EL's EZNEC a lot (it's downright ADDICTIVE!-),
> mostly comparing all-band wire antennas I might be able to construct.
>
> I know how to have it calculate SWR for, say, 3.5-29.7 MHz, but that
> results in a really-dense and hard-to-see chart. Is there a way to
> have EZNEC calculate SWR for JUST certain hambands withOUT showing
> the non-ham-band parts of the spectrum.
>
> For example, 3.5-4 AND 7-7.3 AND 14.0-14.35 AND ...
> but NOT including 4-7 OR 7.3-14 OR 14.35-21 OR ....
>

1833. Re: Mobile balun thoughts

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 05:26:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <tl3pf31na9608chmolqcef53pflh21tt62@4ax.com>
Source record: 35913

On Thu, 27 Sep 2007 20:21:38 -0500, Mike Coslo
<mcoslo@youknow.comcast.net> wrote:

>There is at least one 2 meter Frequency that kicks me out of overdrive.

Hi Mike,

The cabin of a car or truck makes a fairly poor Faraday Shield to 2M.
Try as you might to correct things through a choke (conduction), there
may still be problems (radiation).

It is at this point that most vehicle owners discover all those parts
of their vehicle that are NOT grounded (or, rather, continuously
shielded). Hoods are usually floating with respect to the chassis and
make a great capacitor to the interior of the engine compartment.
Exhaust systems similarly float and are sometimes resonant in upper
HF. Doors hinge on plastic bushings... and the list continues.

73's
Richard Clark, KB7QHC

1834. Re: Chokes and QRN

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 14:01:13 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <JO7Li.50$5o2.16@newsfe12.lga>
Source record: 35914

"> Assuming a good balun, feeder in symmetry plane of beam and the 50"
> under ground, I do not expect much off it.
>
> Also when there would be noise climbing up the feeder (to the beam),
> the noise could also use the (metal) mast.
>
Good point and that is why I am a little confused about using chokes to
lower noise --- in any situation where the coax goes up a tower.

A number of very well-written and interesting papers
describe the effective rejection of chokes (over 5000 ohms when looping the
coax
through several #31 toroids), but they do not discuss the effects on the
total antenna system. As you said, it would seem that any pickup by the coax
external shield would be mostly duplicated by the tower itself and this
would bypass the choke if the coax shield is "grounded" to the tower at the
feed point. (Yes, I know "ground" has many meanings.)

I can see where the choke would help with a dipole, where the coax is not
connected to the tower at all.

Bill - W2WO

1835. Re: Marine 2m Antenna wanted

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 14:05:21 UTC
From: Larry <invalid@invalid.com>
Message-ID: <46fd0a22$0$15912$3406c2d1@news.ncia.net>
Source record: 35915

Bob Bob wrote:
> Hi Larry
>
> Just a quick thought.
>
> Since a moved from the marine band to 2m is down in freq you may get
> away with something you can slip over the marine whip to increase C to
> ground. I am thinking something loose here, not so much a metal to metal
> connection. Since there will be a greater effect at the top end maybe a
> piece of metal pipe just sitting close to the top, maybe buffered with a
> grommet or something to hold it in place.
>
> Might be worth an experimenting if the 2m VSWR on the marine whip is
> beyond bounds!
>
> Of course if you have the money to throw at it, mounting a high gain
> vertical on a steadicam mount might solve the movement induced pattern
> problems! <grin>
>
> Cheers Bob VK2YQA

Hi Bob,

Well, after a bit of experimenting (and remember I'm almost always on an inland lake) I decided to go with the Morad antenna. I've ordered one and a mount - it will probably be here next week. I'm not too concerned with pitch and yaw - it will be close enough to vertical!

Yes, I could detune a marine band antenna - for that matter, the SWR is probably close enough, but this should work and there's some genuine gain, but not so much I have to worry about keeping it vertical.

Actually, I'm lazy!

73,
--

Larry W1HJF
rapp at lmr dot com

1836. Re: Mobile balun thoughts

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 14:36:17 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fdj3h1vqc1@f04n12.cac.psu.edu>
Source record: 35916

Richard Clark wrote:
> On Thu, 27 Sep 2007 20:21:38 -0500, Mike Coslo
> <mcoslo@youknow.comcast.net> wrote:
>
>> There is at least one 2 meter Frequency that kicks me out of overdrive.
>
> Hi Mike,
>
> The cabin of a car or truck makes a fairly poor Faraday Shield to 2M.
> Try as you might to correct things through a choke (conduction), there
> may still be problems (radiation).
>
> It is at this point that most vehicle owners discover all those parts
> of their vehicle that are NOT grounded (or, rather, continuously
> shielded). Hoods are usually floating with respect to the chassis and
> make a great capacitor to the interior of the engine compartment.
> Exhaust systems similarly float and are sometimes resonant in upper
> HF. Doors hinge on plastic bushings... and the list continues.

I have read about the need to use some copper braid to ground a lot of
the parts on the car. The exhaust system is certainly around the length
of the antenna mast in itself.

- 73 de Mike KB3EIA -

1837. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 15:55:55 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <un8qf35e7vbvkpancunkgk3u8tuvp90fen@4ax.com>
Source record: 35917

>
>An excellent reference John. All nicely explained and with pictures. :-)
>Mike G0ULI
I am continually amazed at the amount and quality of information on
the Internet. I am also dismayed how hard it is to separate out the
good from the worthless.

John Ferrell W8CCW
"Life is easier if you learn to
plow around the stumps"

1838. Re: Chokes and QRN

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 16:01:58 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qh8qf3hhg59nu7bdv90h4ghf490jc4kp4b@4ax.com>
Source record: 35918

On Fri, 28 Sep 2007 10:01:13 -0400, "Bill Ogden"
<wogden@attglobal.net> wrote:

>
>"> Assuming a good balun, feeder in symmetry plane of beam and the 50"
>> under ground, I do not expect much off it.
>>
>> Also when there would be noise climbing up the feeder (to the beam),
>> the noise could also use the (metal) mast.
>>
>Good point and that is why I am a little confused about using chokes to
>lower noise --- in any situation where the coax goes up a tower.
>
>A number of very well-written and interesting papers
>describe the effective rejection of chokes (over 5000 ohms when looping the
>coax
>through several #31 toroids), but they do not discuss the effects on the
>total antenna system. As you said, it would seem that any pickup by the coax
>external shield would be mostly duplicated by the tower itself and this
>would bypass the choke if the coax shield is "grounded" to the tower at the
>feed point. (Yes, I know "ground" has many meanings.)
>
>I can see where the choke would help with a dipole, where the coax is not
>connected to the tower at all.

Hi Bill,

The confusion may arrise from the tower's two uses. For the sloper,
it is active; for the beam it shouldn't be.

For the sloper, choke the line at the bottom of the tower. For the
beam, choke the line at the top and the bottom of the tower.

However, as far as this conventional advice goes, the lower choking
would seem to be redundant to the 50 foot run under ground. That
should choke the line just as well. If the beam comes with a choke
(I'm not sure how much they invest in that technically instead of just
for advertising's sake) then there's no point in more there either.

Take a clamp-on ferrite, build a loop of a dozen turns of fine wire
through it; terminate the wire with an LED. Attach this inside the
shack to any feed line and see if the LED lights up during a QSO. If
it does, you may want to replace the LED with a RF Current meter to
see just how much current there is, but my guess is the LED will be
dim at best. [LED current of 10-20 mA @ 2V will be quite bright.]

73's
Richard Clark, KB7QHC

1839. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 16:58:25 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <RoaLi.250678$fJ5.134776@pd7urf1no>
Source record: 35919

Richard Clark wrote:

>
> The gap, the short, and the shield all lend the aura of "magic" to an
> otherwise conventional loop.

One of the first things I learned in my RF education is that a
gap does not necessarily stop the flow of RF, and neither does
a short! The mysteries of shielding I am still learning about.

I thought I had it all nicely sorted out, and then along came
the Fractal antenna! :-)

Irv VE6BP

1840. KB9RQZ posts his bio

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 20:47:01 UTC
From: an old fiend <kb9queer@puncegotcha.com>
Message-ID: <46fd5c58$0$26420$88260bb3@free.teranews.com>
Source record: 35920
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna,soc.men

Gavrielah Hojnacki" <gav@he-she.com> wrote in message

1) I was draft into the US Army.
2) I is a member of the Chemcal Cops
3) The military wont let me retire.
4) I dosn't serve under the name 'Mark Morgan but that's okay cuz theFBI, DOD, and CIA have al todl me I candodit.
5) I is on-the-lam from stalking former marines and fatal atraction four ex-shemale wife almoney
6) I was recenty, paying $5/hr. to acess my ISP
7) I has a 248 IQ, but cant figre out how touse a spel checker.
8) I is a bi-sexual Pagan male ham who like to be spanked.
9) I can't find any action on the military base in Central IL, so I hav to ask the peple on th USNET.
http://www.marksspamblog.blogspot.com/
10) I punce gotcha

you have been fooled and hoodwinked into to follow the trail breadcrumbs of a gruop of vile net stalkers I welcome to this site recovered largely as result of that rotteneighboor.com posting just gott this sit back uner my control you will soon find find link two my other blog that explore bisexal ham radio and the peoples in it.

http://ipunce.blogspot.com/index.html

Shalom

Shalom

--
Posted via a free Usenet account from http://www.teranews.com

1841. Re: I suspect, if Einstein were given a word ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 21:32:26 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fdjs1qqok1@news.service.uci.edu>
Source record: 35921

Nate Bargmann wrote:

> On Wed, 26 Sep 2007 11:33:02 -0700, Jim Kelley wrote:
>
>
>>John Smith wrote:
>>
>>>Perhaps?
>>>
>>>"As far as the laws of mathematics refer to reality, they are not
>>>certain; as far as they are certain, they do not refer to
>>>reality."--Albert Einstein
>>>
>>>And, I humbly propose:
>>>
>>>"Too often, the ignorant are quick to conceal their ignorance in
>>>complexity not well grasped by common men."--John Smith
>>
>>I think that's true. I like it.
>>
>>I like this one too:
>>
>>"He who knows, does not speak. He who speaks, does not know."
>
>
> By that metric, the Internet has gotten less intelligent as it grew.
>
> Who knew?
>
> 73, de Nate >>

After all, what do ancient Chinese philosophers know about the
internet? ;-)

ac6xg

1842. get kelp

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-28 22:25:08 UTC
From: Mark@k4yzRobesin.org
Message-ID: <ppvqf393ev2he5sp50giv3hpho9bhk0ueg@4ax.com>
Source record: 35922
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna,soc.men

On Fri, 28 Sep 2007 16:47:01 -0400, "an old fiend"
<kb9queer@puncegotcha.com> wrote:

>

fake

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

1843. Car radio antenna has an inline .85mfd capacitor, why?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-29 00:16:30 UTC
From: Bill Freeman <nobody@nowhere.invalid>
Message-ID: <280920072016306378%nobody@nowhere.invalid>
Source record: 35923

I have an 87 Nissan van with an antenna wire that has a 0.85 mfd capacitor soldered between the center wire and the center pin of the antenna connector, on the end that plugs into the radio.

This vehicle actually has two antenna wires that connect side by side at the radio. One antenna is printed onto the centerline of the windshield, and the other is a conventional whip antenna mounted at the drivers side of the roof. The roof antenna lead is the one with the capacitor.

Anyone know what the purpose of an inline capacitor would be on a car radio?

Another car antenna question, why do they use such a small diameter wire inside the coax? The wire inside this coax is about .010 inches in diameter. Is it this small to save on copper, or is there some technical advantage to a small diameter wire.

--
Bill Freeman

1844. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-29 03:21:23 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1191036083.650257.233440@19g2000hsx.googlegroups.com>
Source record: 35924

On Sep 27, 7:45 am, John Ferrell <johnferr...@sprintmail.com> wrote:
> On Sun, 23 Sep 2007 12:46:30 -0400, "Rick (W-A-one-R-K-T)"
>
> <get.my.em...@from.qrz.com> wrote:
>
> >I just read the following on one of the mailing lists I subscribe to:
>
> >"Quarter wave ground mounted radials are a waste of wire and a hold over
> >from the olden days. Check the antenna handbook, the new philosophy is
> >more and shorter. The thing is that the bulk of the energy from the
> >vertical antenna is near the base of the antenna and this is what you are
> >trying to capture. A quarter wave radial sounds logical but the planet
> >will detune it so a quarter wave means nothing to the current."
>
> >What say you all?
>
> Read this and see if you really want to know more.
>
> http://www.bencher.com/pdfs/00361ZZV.pdf
>
> A challenge to all you experts out there:
> Can you find anything you disagree with in this document?
>
> John Ferrell W8CCW
> "Life is easier if you learn to
> plow around the stumps"

That seems a very practical ap note. But since you issued the
challenge, I'll say I disagree with the wording of an early sentence,
where it says that ground return currents are "greatly attenuated" if
they come through lossy earth. Clearly, the current is not
attenuated; the current is what it is. However, the current through
lossy ground causes power dissipation (and loss of radiated power) in
the ground.

I think the meaning is clear, but the wording would not pass muster
with a good technical editor.

Cheers,
Tom

1845. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-29 03:43:50 UTC
From: Mark@k4yzRobesin.org
Message-ID: <efirf3dhr0ot0lu27goe7qosb8n59jh7tt@4ax.com>
Source record: 35925
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS
bears repeating

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

1846. Re: Car radio antenna has an inline .85mfd capacitor, why?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-29 05:53:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <frprf3p5cafjdde8v6jsl089ibao0ge11r@4ax.com>
Source record: 35926

On Fri, 28 Sep 2007 20:16:30 -0400, Bill Freeman
<nobody@nowhere.invalid> wrote:

>Anyone know what the purpose of an inline capacitor would be on a car
>radio?

Hi Bill,

Probably for DC isolation (yes, what DC? is reasonable to ask, but it
is probably cheap insurance against an accidental short from antenna
to ground taking out the front end bias, or from static build up (but
a good choke to ground would solve that too)).

>Another car antenna question, why do they use such a small diameter
>wire inside the coax?

To reduce parallel capacitance to ground (line Z is rather immaterial
but its equivalent capacitance is not).

73's
Richard Clark, KB7QHC

1847. Vision, Chicago Dance Club - Events

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-29 08:04:21 UTC
From: Groove <jdegerstrom@gmail.com>
Message-ID: <1191053061.468011.108200@g4g2000hsf.googlegroups.com>
Source record: 35927

The Hottest weekly events brought to you by GrooveAllNight accross the
week from Monday to Friday, Saturday and WOW Sunday!!! Check your
nearest venue at Upcoming events... we have something hot for you !!
Want to check....

Check at
http://www.grooveallnight.com/

Thanks
DJ Events

1848. DJ EVENTS | NIGHT CLUBS

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-29 08:08:59 UTC
From: Groove <jdegerstrom@gmail.com>
Message-ID: <1191053339.753570.216160@22g2000hsm.googlegroups.com>
Source record: 35928

The Hottest weekly events brought to you by GrooveAllNight accross the
week from Monday to Friday, Saturday and WOW Sunday!!! Check your
nearest venue at Upcoming events... we have something hot for you !!
Want to check....

Check at
http://www.grooveallnight.com/

Thanks
DJ Events

1849. Trance House Techno DJs Events - Groove All Night

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-29 08:10:45 UTC
From: Groove <jdegerstrom@gmail.com>
Message-ID: <1191053445.499404.77170@d55g2000hsg.googlegroups.com>
Source record: 35929

The Hottest weekly events brought to you by GrooveAllNight accross the
week from Monday to Friday, Saturday and WOW Sunday!!! Check your
nearest venue at Upcoming events... we have something hot for you !!
Want to check....

Check at
http://www.grooveallnight.com/

Thanks
DJ Events

1850. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-29 09:25:33 UTC
From: "Mark@k4yzRobesin.org" <konstans@hotmail.com>
Message-ID: <19hr7j.sum.19.1@news.alt.net>
Source record: 35930
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

<Mark@k4yzRobesin.org> wrote in message
news:efirf3dhr0ot0lu27goe7qosb8n59jh7tt@4ax.com...
> On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>K4YZ wrote:
>>> Nope.
>>>
>>> The IP Address and servers are complete proof that I do NOT share
>>> any annonymous character's "address".
>>>
>>> Sounds like Lennie, to me....
>>>
>>> Steve, K4YZ
>>>
>>
>>To anyone with even an elementary understanding of anonymous proxies,
>>anonymous remailers, zombie backdoors, etc., the ability to change ones
>>IP address and header details is simplistic, indeed, with little time
>>spent anyone can appear to be "coming" from anywhere in the world.
>>
>>You waste my time. Worse, you think us all idiots here. You remind me
>>of the "street smart" prosecutors and defense attorneys who stack jurys
>>with members of little or no technical knowledge and then call in
>>"expert witnesses" and propose arguments of technical details to boggle
>>their minds.
>>
>>You have only proven that you, yourself are either ignorant to such
>>technical details, or else you are indeed street smart, I favor the
>>latter in this case (however, if you in the dark about such things, 15
>>minutes on google will enlighten you.)
>>
>>JS
> bears repeating becuase i have nothing else to say and it is late
>
> "one useless man is disgrace 2 become a law firm 3 or more become a
> congress"
> adams
>
> woger you are a Congress all in your own head
>
> http://kb9rqz.bravejournal.com/
>

> and get ou the newly recovered KB9RQZ.blogspot.com as well
>
> G
>
> --
> Posted via a free Usenet account from http://www.teranews.com
>

1851. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-29 12:05:19 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <nqesf3h9jkor37ru78s7u4lujororoonnj@4ax.com>
Source record: 35931

On Fri, 28 Sep 2007 20:21:23 -0700, K7ITM <k7itm@msn.com> wrote:

>On Sep 27, 7:45 am, John Ferrell <johnferr...@sprintmail.com> wrote:
>> On Sun, 23 Sep 2007 12:46:30 -0400, "Rick (W-A-one-R-K-T)"
>>
>> <get.my.em...@from.qrz.com> wrote:
>>
>> >I just read the following on one of the mailing lists I subscribe to:
>>
>> >"Quarter wave ground mounted radials are a waste of wire and a hold over
>> >from the olden days. Check the antenna handbook, the new philosophy is
>> >more and shorter. The thing is that the bulk of the energy from the
>> >vertical antenna is near the base of the antenna and this is what you are
>> >trying to capture. A quarter wave radial sounds logical but the planet
>> >will detune it so a quarter wave means nothing to the current."
>>
>That seems a very practical ap note. But since you issued the
>challenge, I'll say I disagree with the wording of an early sentence,
>where it says that ground return currents are "greatly attenuated" if
>they come through lossy earth. Clearly, the current is not
>attenuated; the current is what it is. However, the current through
>lossy ground causes power dissipation (and loss of radiated power) in
>the ground.
>
>I think the meaning is clear, but the wording would not pass muster
>with a good technical editor.
>
>Cheers,
>Tom
Good catch. It could have been more precisely stated.
In defense of the the point, Dictionary.com offers this definition of
"attenuated"- to weaken or reduce in force, intensity, effect,
quantity, or value.

OTH, lossy earth is a limiting factor to the current component of the
equation.

I think it unlikely to be misinterpretd so I would be inclined to
leave it alone. Of course, I am not a Technical Editor.

John Ferrell W8CCW
"Life is easier if you learn to
plow around the stumps"

1852. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-29 13:06:28 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fdlikn$5gi$1@aioe.org>
Source record: 35932

"K7ITM" wrote
>... I'll say I disagree with the wording of an early sentence,
> where it says that ground return currents are "greatly attenuated"
> of they come through lossy earth. Clearly, the current is not
> attenuated; the current is what it is. However, the current through
> lossy ground causes power dissipation (and loss of radiated
> power) in the ground.

But without a low-loss r-f ground for a monopole such as provided by a good buried radial system, those returning r-f currents ARE greatly attenuated before they can enter into the ground terminal of the antenna system.

That ground resistance is in series with the radiation resistance of the monopole, and so will reduce the current that will flow on the monopole -- hence the field it will radiate.

RF

1853. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-29 14:14:54 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fdlml1glk1@aioe.org>
Source record: 35933

Rick (W-A-one-R-K-T) wrote
> I just read the following on one of the mailing lists I subscribe to:
>
> "Quarter wave ground mounted radials are a waste of wire and
> a hold over from the olden days. Check the antenna handbook,
> the new philosophy is more and shorter...."

Below is a link to a calculator on the FCC website giving some insight into this. It restricts inputs to values allowed for AM broadcast stations, but still might be of some value to amateurs.

For one example, it shows a 1/4-wave monopole using 120 x 1/4-wave buried radials as generating a groundwave field of about 306 mV/m at 1 km for 1 kW of applied power.

If the number of radials is reduced to 90, and their length is reduced to 0.153 wavelength, the groundwave field is reduced to 267 mV/m.

The difference in radiated power then is (267/306)^2, or about 24%, which value is dissipated by heating the earth.

Whether or not that reduction is important to amateurs is a judgment call. But an antenna system producing 267 mV/m for these conditions would be unusable by a "regional" AM broadcast station -- which per their station license must produce a groundwave rms field of at least 282 mV/m at 1 km for 1 kW of applied power.

http://www.fcc.gov/mb/audio/bickel/figure8.html

RF

1854. Re: Car radio antenna has an inline .85mfd capacitor, why?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-29 17:25:26 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <aUvLi.1897$P21.1518@newssvr19.news.prodigy.net>
Source record: 35934

Bill Freeman wrote:
> Anyone know what the purpose of an inline capacitor would be on a car
> radio?

DC isolation and/or impedance matching.
--
73, Cecil http://www.w5dxp.com

1855. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-29 17:52:51 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <UhwLi.1900$P21.455@newssvr19.news.prodigy.net>
Source record: 35935

K7ITM wrote:
> I'll say I disagree with the wording of an early sentence,
> where it says that ground return currents are "greatly attenuated" if
> they come through lossy earth. Clearly, the current is not
> attenuated; the current is what it is.

There is some confusion between DC circuits and
distributed RF networks. In a DC circuit, the
current is the same throughout the circuit. In
a distributed RF network, the current is usually
NOT the same throughout the network. One can
put one amp of current into a buried radial and
measure zero amps from some point outward.

In particular, when dealing with RF EM waves, the
H-field to which the current is proportional in
a transmission line is attenuated by the same
attenuation factor as is the E-field to which
the voltage is proportional. Please reference
the transmission line equations to verify that
fact.

Such is easy to see. If one has a flat Z0=50 ohm
transmission line with 100 watts in and 50 watts
out, there is 1.414 amps in and 1.0 amp out because
the ratio of voltage to current is fixed at 50 ohms.
The traveling-wave current in an EM wave in a
transmission line (or in a radial in lossy earth)
is attenuated exactly as much as the voltage.

And don't feel too ignorant about that fact of physics.
Some of the gurus on this newsgroup make a similiar
mistake about RF EM wave current through a loading coil.
--
73, Cecil http://www.w5dxp.com

1856. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-29 17:56:42 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <ulwLi.1901$P21.60@newssvr19.news.prodigy.net>
Source record: 35936

Richard Fry wrote:
> ... those returning r-f currents ARE greatly
> attenuated before they can enter into the ground terminal of the antenna
> system.

Richard, too many people, including some of the gurus,
are thinking DC circuits. The only difference between
the voltage equation and the current equation is a
division by Z0, i.e. the current is attenuated exactly
by the same factor as the voltage.
--
73, Cecil http://www.w5dxp.com

1857. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-29 22:57:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13ftm20n2mh2h26@corp.supernews.com>
Source record: 35937

Richard Fry wrote:
>
> Below is a link to a calculator on the FCC website giving some
> insight into this. It restricts inputs to values allowed for AM broadcast
> stations, but still might be of some value to amateurs.
>
> For one example, it shows a 1/4-wave monopole using 120 x
> 1/4-wave buried radials as generating a groundwave field of
> about 306 mV/m at 1 km for 1 kW of applied power.
>
> If the number of radials is reduced to 90, and their length is reduced
> to 0.153 wavelength, the groundwave field is reduced to 267 mV/m.
>
> The difference in radiated power then is (267/306)^2, or about
> 24%, which value is dissipated by heating the earth.
>
> Whether or not that reduction is important to amateurs is a judgment
> call. But an antenna system producing 267 mV/m for these conditions
> would be unusable by a "regional" AM broadcast station -- which per
> their station license must produce a groundwave rms field of at least
> 282 mV/m at 1 km for 1 kW of applied power.
>
> http://www.fcc.gov/mb/audio/bickel/figure8.html
>
> RF

This is a good example of why we shouldn't assume that what's suitable or optimum for AM broadcasting or some other service is necessarily the best solution for amateur applications. A reduction in radiated power of 24% is just about 1 dB. While this amount of attenuation makes the system unsuitable for AM broadcasting, it would be difficult to even detect that amount of difference except just perhaps in the most demanding amateur communication -- right at the noise level -- and it would go completely unnoticed in the vast majority of cases.

Roy Lewallen, W7EL

1858. Looking for groundwave propagation experience on 20m

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-29 23:26:16 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <ph33t4-uk1.ln1@p400bob.personal.cox.net>
Source record: 35938

Hi all

I am gradually working up to a project to TX telemetry from the car at very low QRSS type data rates. Because of the unattended nature of the system I am going to start using the HiFER freq of 13.56Mhz rather than a "real" amateur allocation.

This of course means very low output power and no doubt a number of other limitations for the TX. I really only need the system to work predominately <10 miles from the base.

Yes I am aware of the frequency stability issues for very narrow band signals. No doubt the vehicle bouncing around wont help either! May end up using a Picollo type system where the freq difference between two states is used to send data.

I am after some feedback and ideas about antenna systems to use. I suspect the car TX antenna will only be a wire draped across the rear window or a loaded broadcast antenna. The RX base antenna was going to be just a dipole but I reasoned that this would be great for DX but terrible for groundwave. Then thought about a vertical dipole, but am concerned about the higher noise level. I'll probably end up trying both. Initial tests are only going to be looking for a CW signal on a waterfall.

Would also consider experimenting at a MedFER freq around 1700KHz but base antenna efficiency might be pretty bad. There is also a lot more RFI there.

Ideas welcome. If however you want to say it "wont work" please back it up with some maths/calcs or your own direct experiences.

Cheers

Bob VK2YQA

1859. Re: Looking for groundwave propagation experience on 20m

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-30 00:48:17 UTC
From: Dave <noone@nowhere.com>
Message-ID: <lnCLi.440$DF2.58@trndny09>
Source record: 35939

here in the states we call 13.56MHz an ISM frequency. Meaning Industrial, Scientific, and Medical. near any populated area you are liable to run into diathermy machines, plasma ovens, rfid tag readers, and a host of other noise generators there. i would suspect your environment may be similar.

for ground wave the vertical would probably be best, especially for omnidirectional covereage... though a low dipole would likely work almost as well.

frequency stability with modern equipment shouldn't be a problem, just be sure to build everything nice an solid so it doesn't 'bounce around' and it shouldn't be a problem... not like bouncing around tubes with mechanical elements that would vibrate and move in the distant past.

"Bob Bob" <bob3bob3@suddenlink.net> wrote in message
news:ph33t4-uk1.ln1@p400bob.personal.cox.net...
> Hi all
>
> I am gradually working up to a project to TX telemetry from the car at
> very low QRSS type data rates. Because of the unattended nature of the
> system I am going to start using the HiFER freq of 13.56Mhz rather than
> a "real" amateur allocation.
>
> This of course means very low output power and no doubt a number of
> other limitations for the TX. I really only need the system to work
> predominately <10 miles from the base.
>
> Yes I am aware of the frequency stability issues for very narrow band
> signals. No doubt the vehicle bouncing around wont help either! May end
> up using a Picollo type system where the freq difference between two
> states is used to send data.
>
> I am after some feedback and ideas about antenna systems to use. I
> suspect the car TX antenna will only be a wire draped across the rear
> window or a loaded broadcast antenna. The RX base antenna was going to
> be just a dipole but I reasoned that this would be great for DX but
> terrible for groundwave. Then thought about a vertical dipole, but am
> concerned about the higher noise level. I'll probably end up trying
> both. Initial tests are only going to be looking for a CW signal on a
> waterfall.
>
> Would also consider experimenting at a MedFER freq around 1700KHz but
> base antenna efficiency might be pretty bad. There is also a lot more
> RFI there.
>

> Ideas welcome. If however you want to say it "wont work" please back it
> up with some maths/calcs or your own direct experiences.
>
> Cheers
>
> Bob VK2YQA

1860. what homebrew HF antenna produces the most groundwave?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-30 01:39:55 UTC
From: Anonymous <anyone@no-spam-please.com>
Message-ID: <2909200721395535 22%anyone@no-spam-please.com>
Source record: 35990

Of all the HF antennas one might reasonably make out of wire or
aluminum tubing, which produces the strongest groundwave?
Ground-mounted quarter-wave vertical? Horizontal dipole at a height of
1/4 wavelength? Or what? I'm sure someone must have experimented, or
done computer modelling, to seek an answer to this question but I am
not finding any information.

--
-30-

1861. Re: what homebrew HF antenna produces the most groundwave?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-30 02:29:20 UTC
From: nm5k@wt.net
Message-ID: <1191119360.483873.55100@n39g2000hsh.googlegroups.com>
Source record: 35991

On Sep 29, 8:39 pm, Anonymous <any...@no-spam-please.com> wrote:
> Of all the HF antennas one might reasonably make out of wire or
> aluminum tubing, which produces the strongest groundwave?
> Ground-mounted quarter-wave vertical? Horizontal dipole at a height of
> 1/4 wavelength? Or what? I'm sure someone must have experimented, or
> done computer modelling, to seek an answer to this question but I am
> not finding any information.
>
> --
> -30-

If all things are set up properly, normally the 5/8 will give the
strongest
ground wave for a single element. You have very little if any true
ground
wave from a horizontal antenna. You do have a space wave, but it's
not
quite the same.
MK

1862. Re: Probably a stupid question, but...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-30 10:23:06 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46ff78ff$0$18924$4c368faf@roadrunner.com>
Source record: 35992

"Owen Duffy" <none@no.where> wrote in message
news:Xns99B9421E8FD57nonenowhere@61.9.191.5...
> Richard Clark <kb7qhc@comcast.net> wrote in
> news:7j1of3tau7vl28ufv5sfj48gatlskk0arq@4ax.com:
>
>> Shielding does nothing but describe a balance. You can as easily
>> remove the shield and obtain identical performance IF you guarantee
>> balance. This was done for decades before coaxial cable was common.
>
> Hi Richard,
>
> For Dave's benefit, I might explain that the risk attendent in using a
> small loop on a long transmission line is that the outside of the
> transmission line becomes a significant radiator. In the limit, the loop
> becomes just a means of exciting the outside of the transmission line as
> the main element of the antenna system.

That would explain something I experienced years ago. A DF loop mounted thru the roof on a metal building worked great, when it was moved to another building with fiberglass roof and walls its performance was degraded to the point of being useless for our purpose.

Jimmie Fender

1863. Re: Looking for groundwave propagation experience on 20m

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-30 13:02:09 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1191157329.524374.269250@50g2000hsm.googlegroups.com>
Source record: 35993

On Sep 29, 8:48 pm, "Dave" <no...@nowhere.com> wrote:
> here in the states we call 13.56MHz an ISM frequency. Meaning Industrial,
> Scientific, and Medical. near any populated area you are liable to run into
> diathermy machines, plasma ovens, rfid tag readers, and a host of other
> noise generators there. i would suspect your environment may be similar.
>
> for ground wave the vertical would probably be best, especially for
> omnidirectional covereage... though a low dipole would likely work almost as
> well.
>
> frequency stability with modern equipment shouldn't be a problem, just be
> sure to build everything nice an solid so it doesn't 'bounce around' and it
> shouldn't be a problem... not like bouncing around tubes with mechanical
> elements that would vibrate and move in the distant past.
>
> "Bob Bob" <bob3b...@suddenlink.net> wrote in message
>
> news:ph33t4-uk1.ln1@p400bob.personal.cox.net...
>
>
>
> > Hi all
>
> > I am gradually working up to a project to TX telemetry from the car at
> > very low QRSS type data rates. Because of the unattended nature of the
> > system I am going to start using the HiFER freq of 13.56Mhz rather than
> > a "real" amateur allocation.
>
> > This of course means very low output power and no doubt a number of
> > other limitations for the TX. I really only need the system to work
> > predominately <10 miles from the base.
>
> > Yes I am aware of the frequency stability issues for very narrow band
> > signals. No doubt the vehicle bouncing around wont help either! May end
> > up using a Picollo type system where the freq difference between two
> > states is used to send data.
>
> > I am after some feedback and ideas about antenna systems to use. I
> > suspect the car TX antenna will only be a wire draped across the rear
> > window or a loaded broadcast antenna. The RX base antenna was going to
> > be just a dipole but I reasoned that this would be great for DX but
> > terrible for groundwave. Then thought about a vertical dipole, but am
> > concerned about the higher noise level. I'll probably end up trying
> > both. Initial tests are only going to be looking for a CW signal on a

> > waterfall.
>
> > Would also consider experimenting at a MedFER freq around 1700KHz but
> > base antenna efficiency might be pretty bad. There is also a lot more
> > RFI there.
>
> > Ideas welcome. If however you want to say it "wont work" please back it
> > up with some maths/calcs or your own direct experiences.
>
> > Cheers
>
> > Bob VK2YQA- Hide quoted text -
>
> - Show quoted text -

10 miles ground wave at 14 meg is going to be iffy....

denny / k8do

1864. Connector repair

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-30 13:45:50 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46ffa881$0$32535$4c368faf@roadrunner.com>
Source record: 35994

I have a cable with a female N connector that the treads are damaged. Could someone tell me what size die to use to rethread it. I am familar with alternate methods of cleaning up bunged up threads, this one really needs a die run over it.

Jimmie

1865. Re: Connector repair

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-30 14:56:28 UTC
From: Danny Richardson <>
Message-ID: <n5evf31spdbbqhknuohj0076mjkjpbrr7c@4ax.com>
Source record: 35995

On Sun, 30 Sep 2007 09:45:50 -0400, "Jimmie D"
<GFENDER@carolina.rr.com> wrote:

>I have a cable with a female N connector that the treads are damaged. Could
>someone tell me what size die to use to rethread it. I am familar with
>alternate methods of cleaning up bunged up threads, this one really needs a
>die run over it.
>
>Jimmie

5/8-24

Danny, K6MHE

1866. Re: Looking for groundwave propagation experience on 20m

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-30 17:09:16 UTC
From: Tom Ring <news0004@taring.org>
Message-ID: <46ffd83d$0$97899$8046368a@newsreader.iphouse.net>
Source record: 35996

Bob Bob wrote:
> Hi all
>
<snip>
>
> Ideas welcome. If however you want to say it "wont work" please back it
> up with some maths/calcs or your own direct experiences.
>
> Cheers
>
> Bob VK2YQA

I am able to work 40 to 45 miles from my mobile, using a 20m Hamstick in the center of the sedan roof, to a friend who is using a ground mounted vertical made from half a driven element from an old tribander. We are both running 100W SSB, and the received signal levels are just enough above the noise level to communicate. The terrain is relatively level, and the path is from the western Minneapolis suburbs to a town southwest of Minneapolis.

tom
K0TAR

1867. Re: what homebrew HF antenna produces the most groundwave?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-30 17:43:39 UTC
From: Wimpie <wimtel@tetech.nl>
Message-ID: <1191174219.248001.298380@o80g2000hse.googlegroups.com>
Source record: 35997

On 30 sep, 03:39, Anonymous <any...@no-spam-please.com> wrote:
> Of all the HF antennas one might reasonably make out of wire or
> aluminum tubing, which produces the strongest groundwave?
> Ground-mounted quarter-wave vertical? Horizontal dipole at a height of
> 1/4 wavelength? Or what? I'm sure someone must have experimented, or
> done computer modelling, to seek an answer to this question but I am
> not finding any information.
>
> --
> -30-

Hello "Anonymus".

I assume that you want to maximize field strength close to ground.
At the low HF (and of course medium wave), the surface wave
contributes lots to the signal strength. These ones you can only
excite with a vertical polarized antenna. Also elevated vertical
antennas induce surface waves, so a ground connection is not mandatory
(but many times required practically because of antenna size).

As mentioned by other poster, 5/8lambda vertical fed over a good
ground network gives highest gain in horizontal plane (with a minor
side lobe).

At high frequency (and low ground conductivity), surface waves do not
play an important role. In that case height is the determining factor
(with high directivity in the horizontal plane). Polarization is of
less importance.

Best regards,

Wim
PA3DJS

1868. Re: Chokes and QRN

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-30 18:13:38 UTC
From: Bill Ogden <wogden@attglobal.net>
Message-ID: <lHRLi.68$kd4.34@newsfe12.lga>
Source record: 35998

>
> For the sloper, choke the line at the bottom of the tower. For the
> beam, choke the line at the top and the bottom of the tower.
>
> However, as far as this conventional advice goes, the lower choking
> would seem to be redundant to the 50 foot run under ground. That
> should choke the line just as well. If the beam comes with a choke
> (I'm not sure how much they invest in that technically instead of just
> for advertising's sake) then there's no point in more there either.
>
>

Good advice about the sloper; and about the 50' underground acting as a choke. I was hoping for a magic solution to a little of the "atmospheric" noise on 80 and 160, but there may not be any magic.

I do not sense much of a noise problem with the beam, but I will try a choke at the feed point sometime. (The coax to the beam also has the 50' underground run, so a choke at the bottom of the tower is probably not needed.)

Bill - W2WO

1869. Re: Chokes and QRN

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-30 18:18:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <hupvf3lj2htg2glqvl4pf7uf2aukfq0a5q@4ax.com>
Source record: 35999

On Sun, 30 Sep 2007 14:13:38 -0400, "Bill Ogden"
<wogden@attglobal.net> wrote:

>I do not sense much of a noise problem with the beam, but I will try a choke
>at the feed point sometime.

Hi Bill,

The reason why you would choke or beef up an existing choke for the
beam is as to deepen the nulls that are filled by the 60 foot drop
line that might be radiating/receiving. In a sense, this choking
would lower noise coming in from what should be nulled regions in your
pattern.

73's
Richard Clark, KB7QHC

1870. Re: Connector repair

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-30 19:17:40 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <46fff649$0$20633$4c368faf@roadrunner.com>
Source record: 36000

<Danny Richardson> wrote in message
news:n5evf31spdbbqhknuohj0076mjkjpbrr7c@4ax.com...
> On Sun, 30 Sep 2007 09:45:50 -0400, "Jimmie D"
> <GFENDER@carolina.rr.com> wrote:
>
>>I have a cable with a female N connector that the treads are damaged.
>>Could
>>someone tell me what size die to use to rethread it. I am familar with
>>alternate methods of cleaning up bunged up threads, this one really needs
>>a
>>die run over it.
>>
>>Jimmie
>
> 5/8-24
>
> Danny, K6MHE
>
>
>

Thanks Danny, an excuse to make a trip to my favorite hardware store as I
dont have one.

Jimmie

1871. Re: Looking for groundwave propagation experience on 20m

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-30 20:48:23 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <nle5t4-9m4.ln1@p400bob.personal.cox.net>
Source record: 36001

Hi Denny

Pls elaborate.

Are you talking about a SSB voice situation or bandwidths that will
yield maybe 20-30dB better conditions? Also what power level are you
talking about?

Pls be specific.

Denny wrote:
>
> 10 miles ground wave at 14 meg is going to be iffy....
>
> denny / k8do
>

1872. Re: Looking for groundwave propagation experience on 20m

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-30 20:51:25 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <ere5t4-7n4.ln1@p400bob.personal.cox.net>
Source record: 36002

Many thanks Tom

I can probably extrapolate from those numbers.

I haven't looked at the ISM/HiFER rules/regs but the QRSS type mode
itself is going to be maybe 20-30dB "better" than SSB. I guess I'd be on
par with your numbers at 100-200mW o/p
Cheers Bob

Tom Ring wrote:

>
> I am able to work 40 to 45 miles from my mobile, using a 20m Hamstick in
> the center of the sedan roof, to a friend who is using a ground mounted
> vertical made from half a driven element from an old tribander. We are
> both running 100W SSB, and the received signal levels are just enough
> above the noise level to communicate. The terrain is relatively level,
> and the path is from the western Minneapolis suburbs to a town southwest
> of Minneapolis.
>
> tom
> K0TAR

1873. Re: KB9RQZ posts his bio

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-30 21:29:31 UTC
From: kb9rqz <kb9queer@puncegotcha.com>
Message-ID: <47000952$0$26382$88260bb3@free.teranews.com>
Source record: 36003
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna,soc.men

"KB9RQZ" <kb9rqz@punce.com> wrote in message
news:46f933ee$0$26505$88260bb3@free.teranews.com...
>
> "Gavrielah Hojnacki" <gav@he-she.com> wrote in message
> news:46f912dc$0$26384$88260bb3@free.teranews.com...
>> 1) I was draft into the US Army.
>> 2) I is a member of the Chemcal Cops
>> 3) The military wont let me retire.
>> 4) I dosn't serve under the name 'Mark Morgan but that's okay cuz theFBI,
>> DOD, and CIA have al todl me I candodit.
>> 5) I is on-the-lam from stalking former marines and fatal
>> atraction four ex-shemale wife almoney
>> 6) I was recenty, paying $5/hr. to acess my ISP
>> 7) I has a 248 IQ, but cant figre out how touse a spel checker.
>> 8) I is a bi-sexual Pagan male ham who like to be spanked.
>> 9) I can't find any action on the military base in Central IL, so I hav
>> to
>> ask the peple on th USNET.
>> http://www.marksspamblog.blogspot.com/
>> 10) I punce gotcha
>>
>>
>> <Mark@TayleorRobesin.org> wrote in message
>> news:f5ugf3126el380ab0og3k72nr590ciafh1@4ax.com...
>>> bears repeating
>>>
>>>
>> INDEED!
>>
>>
>>
>
> you have been fooled and hoodwinked into to follow the trail breadcrumbs
> of
> a gruop of vile net stalkers I welcome to this site recovered largely as
> result of that rotteneighboor.com posting just gott this sit back uner my
> control you will soon find find link two my other blog that explore
> bisexal
> ham radio and the peoples in it.
>
> http://ipunce.blogspot.com/index.html
>
> Shalom

>
> Shalom
>
>
>
INDEED!!!

--
Posted via a free Usenet account from http://www.teranews.com

1874. get kelp

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-30 21:57:50 UTC
From: Mark@k4yzRobesin.org
Message-ID: <gu60g356k4271jtjiqkdeps4iqm7bj27c1@4ax.com>
Source record: 36004
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna,soc.men

On Sun, 30 Sep 2007 17:29:31 -0400, "kb9rqz" <kb9queer
fake

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

1875. Re: Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-09-30 22:35:46 UTC
From: oeguet@gmx.de
Message-ID: <1191191746.003756.117680@19g2000hsx.googlegroups.com>
Source record: 36005

Good news!

It is really possible, to speed up NEC calculations with CPUs containing more then one core. I will try to implement a wrapper-executable, that makes possible with your old NEC-engines (e.g. NEC2). It need no recompilation of nec engine or any modifications. Just renaming the old engine and putting the wrapper-engine on the same directory with the original nec engine file name.

After implementing a new antenna optimizer (that one uses also multi-core, multi-cpu enhancement), I will start with the wrapper code. I will test the code with 4nec2, so many of you could take advantage of multi-cores with 4nec2.

regards,
Aziz

1876. Re: what homebrew HF antenna produces the most groundwave?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 00:40:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13g0gfknu9nhbcf@corp.supernews.com>
Source record: 36006

Wim mentioned the high angle lobe you get with a 5/8 wave antenna. It produces a sky wave which can, if skip conditions are present, interfere with the ground wave signal and cause fading. This could be a very common and serious problem at higher frequencies where the ground wave is weaker and the sky wave stronger. You can reduce this by keeping the radiator height to 1/2 wavelength or less. Antennas in that height range don't have a high angle lobe, although they do produce some radiation at high angles. Radiators near a half wavelength in height produce less high angle radiation than shorter antennas, and they have more horizontal gain, so I'd think they would be best. I'm sure the AM broadcasters have other "anti-fading" techniques -- other newsgroup contributors would know much more about them than I do.

Roy Lewallen, W7EL

1877. Motorola ConvertaCom connector

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 02:17:21 UTC
From: Dan Yemiola AI8O <Dan@Yemiola.Net>
Message-ID: <fdplo0$9tn$1@news04.infoave.net>
Source record: 36007

In my truck I had a Motorola 800 MHz ConvertaCom unit that worked with a XTS5000.
The ConvertaCom has been removed, but the Antenna, NMO antenna mount and the Coax cable have not been removed.
I would like to put in a scanner and use the 800 MHz cable by putting an adapter connector on the inside end.

Can anyone tell me what the end connector on the ConvertaCom cable is?
Where can I get an RCA or PL259 adapter?

Dan
AI8O

1878. Re: Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 04:00:32 UTC
From: jimlux@earthlink.net
Message-ID: <1191211232.794827.69940@w3g2000hsg.googlegroups.com>
Source record: 36008

On Sep 25, 5:12 am, Nate Bargmann
<n0nb.DO.NOT.S...@ME.networksplus.net> wrote:
> I'm not sure if this is what you're looking for, NEC ported to C:
>

Hmmm.. Isn't that the version that used f2c to convert the FORTRAN to C? Probably a bad plan overall.. there's some reputed bugs in the process, and it's going to use different libraries, etc. If you're worried about performance, stick with the FORTRAN and use a good compiler.

1879. Re: Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 04:01:42 UTC
From: jimlux@earthlink.net
Message-ID: <1191211302.264520.160490@57g2000hsv.googlegroups.com>
Source record: 36009

On Sep 30, 3:35 pm, oeg...@gmx.de wrote:
> Good news!
>
> It is really possible, to speed up NEC calculations with CPUs
> containing more then one core. I will try to implement a wrapper-
> executable, that makes possible with your old NEC-engines (e.g. NEC2).
> It need no recompilation of nec engine or any modifications. Just
> renaming the old engine and putting the wrapper-engine on the same
> directory with the original nec engine file name.
>
> After implementing a new antenna optimizer (that one uses also multi-
> core, multi-cpu enhancement), I will start with the wrapper code. I
> will test the code with 4nec2, so many of you could take advantage of
> multi-cores with 4nec2.
>
> regards,
> Aziz

An excellent idea. Arie has already put a decent symbol substitution
processor in, so if you can read the same files, and then farm out the
various symbol values to the processors in a reasonable way, that
would be pretty useful.

1880. I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 04:51:35 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.10.01.04.51.34.113123@from.qrz.com>
Source record: 36010

I went to visit a ham acquaintance of mine today. He is putting up a 100-foot tower with a large HF beam on top, guyed in three places.

He is not fastening the base plate of the tower to the concrete base in any way... the tower just rests on the top of the concrete base, and the three sets of guys hold it in place.

He explained that the main failure mode for towers is due to twisting in high winds with high-wind-load antennas, so by not fastening the base plate in any way and just letting it rest on the concrete, he allows it to rotate a few degrees if needed (by sliding on the concrete) and lessens or prevents rotational stress on the tower.

I understand what he is saying but this is the first time in 45 years as a ham that I've ever heard of a tower being erected in this way.

Is this a common way to install a tower, and does it make sense?

Sure does seem to me like bolting the tower base plate down to the concrete has a lot more upside than downside, but WDIK?

Reminds me of a day back in the 1970's when a bunch of us were working on a 120-foot tower, guyed in three places, that held our repeater antenna. Due to events the details of which I have long since forgotten, all three of the guys on one leg became disconnected so that there was absolutely NO guying support on that side. One of the team was about 80 feet up the tower at the time. The tower curved over like a banana but stayed up, and we were able to re-install the guys before the tower came crashing down taking our friend with it. He did have to change his pants, though. :-\

Pretty easy to imagine what would have happened if the tower base hadn't been fastened down...

1881. Re: Connector repair

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 07:26:50 UTC
From: Jeff <jeff@local.host>
Message-ID: <4700a4be$0$1340$834e42db@reader.greatnowhere.com>
Source record: 36011

"Jimmie D" <GFENDER@carolina.rr.com> wrote in message
news:46fff649$0$20633$4c368faf@roadrunner.com...
>
> <Danny Richardson> wrote in message
> news:n5evf31spdbbqhknuohj0076mjkjpbrr7c@4ax.com...
>> On Sun, 30 Sep 2007 09:45:50 -0400, "Jimmie D"
>> <GFENDER@carolina.rr.com> wrote:
>>
>>>I have a cable with a female N connector that the treads are damaged.
>>>Could
>>>someone tell me what size die to use to rethread it. I am familar with
>>>alternate methods of cleaning up bunged up threads, this one really needs
>>>a
>>>die run over it.
>>>
>>>Jimmie
>>
>> 5/8-24

A replacement connector would be cheaper than a die, and if the threads are
really that damaged what is the rest of the connector like??

73
Jeff

1882. Re: Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 07:48:18 UTC
From: oeguet@gmx.de
Message-ID: <1191224898.579139.43860@n39g2000hsh.googlegroups.com>
Source record: 36012

Hello Jim,

on the last 6 month, I wrote a "C-language-like" NEC-Compiler, which generates symbolic antenna models and therefore the output model can be read directly from 4nec2. The generated code is fully symbolic, so the antenne parameters can be optimized with 4nec2 as usual.

As an experiment of one of the simplest optimization function (monte carlo method), I started the new optimizer and of course in the hope of getting some speed enhancements. Some antenne problems have a big local minima problem and sometimes the optimization get stucks in a next optimum level (local minima), but not the best one (global minima).

With the monte carlo method, this can not be happend, but it takes much more computation time. The new optimizer of course, uses the new NEC-compiler, to generate different parameters and NEC-Input for the engines.

At the moment, I interrupted the development of the optimizer and startet with the NEC-Engine Wrapper. I have coded during last night the most parts of it and I just have to merge the results now. On my dual-core Intel CPU, the performance level of the CPU goes directly to 100% with running two NEC-Engines in the background, so they use all the CPU-Cores at the same time.
Merging the results, is much more non-trivial part. I hope, I can solve this very elegant.
The integration of the NEC-Wrapper will be transparent and seamless.

I will see, how far I can go.

Regards,
Aziz

1883. Re: Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 08:13:40 UTC
From: oeguet@gmx.de
Message-ID: <1191226420.178781.266680@o80g2000hse.googlegroups.com>
Source record: 36013

On 1 Okt., 06:01, jim...@earthlink.net wrote:
> On Sep 30, 3:35 pm, oeg...@gmx.de wrote:
>
>
>
>
>
> > Good news!
>
> > It is really possible, to speed up NEC calculations with CPUs
> > containing more then one core. I will try to implement a wrapper-
> > executable, that makes possible with your old NEC-engines (e.g. NEC2).
> > It need no recompilation of nec engine or any modifications. Just
> > renaming the old engine and putting the wrapper-engine on the same
> > directory with the original nec engine file name.
>
> > After implementing a new antenna optimizer (that one uses also multi-
> > core, multi-cpu enhancement), I will start with the wrapper code. I
> > will test the code with 4nec2, so many of you could take advantage of
> > multi-cores with 4nec2.
>
> > regards,
> > Aziz
>
> An excellent idea. Arie has already put a decent symbol substitution
> processor in, so if you can read the same files, and then farm out the
> various symbol values to the processors in a reasonable way, that
> would be pretty useful.- Zitierten Text ausblenden -
>
> - Zitierten Text anzeigen -

I forgot to mention, that the nec code is compatible with 4nec2-files.
I am also able to compile the 4nec2 symbolic code. And the compiled
output is also compatible to 4nec2.

1884. j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 11:44:53 UTC
From: michel
Message-ID: <4700ddf0$0$245$e4fe514c@news.xs4all.nl>
Source record: 36014

Hello all,

As a new Novice amateur I am considering to build my first antenna.
I know that starting with a j-pole is simple and easy. However. I see many plans on the internet.

One of interest is the stacked 5/8 wave j-pole.
I only see this in a stacked version. In a not stacked way I only see the half wave version with a quarter stub.

Can a 5/8 wave length and 1/2 wave stub work as a real 5/8 wave antenna?

Looking forward for any suggestion!

1885. Re: I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 12:43:06 UTC
From: ricknj10@hotmail.com
Message-ID: <4700eade.72778000@news.optonline.net>
Source record: 36015

Absolutely absurd. I hope he is the one who is going up top to install his antennas.

The other Rick, K2XT

1886. Re: I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 12:51:15 UTC
From: gwatts <gwatts@frontiernet.net>
Message-ID: <736Mi.17960$B25.2491@news01.roc.ny>
Source record: 36017

Rick (W-A-one-R-K-T) wrote:
> I went to visit a ham acquaintance of mine today. He is putting up a
> 100-foot tower with a large HF beam on top, guyed in three places.
>
> He is not fastening the base plate of the tower to the concrete base in
> any way... the tower just rests on the top of the concrete base, and the
> three sets of guys hold it in place.
>
> He explained that the main failure mode for towers is due to twisting in
> high winds with high-wind-load antennas, so by not fastening the base
> plate in any way and just letting it rest on the concrete, he allows it to
> rotate a few degrees if needed (by sliding on the concrete) and lessens or
> prevents rotational stress on the tower.

With the weight of the tower and the downward force of the guys aiding
the friction on the base, and the guys' resistance to the tower twisting
I doubt not fastening the base has any appreciable effect, but as you
said (farther down), WDIK?

Even so, It's very doubtful the friction will be the same over the whole
base-concrete interface, such that on a windy day his tower might just
walk off the concrete or at least far enough out from under the rest of
the tower that the force from the guys becomes unbalanced enough that it
pulls itself down, but as has been said, WDIK?

> I understand what he is saying but this is the first time in 45 years as
> a ham that I've ever heard of a tower being erected in this way.
>
> Is this a common way to install a tower, and does it make sense?

If it's common it's a well kept secret.

> Sure does seem to me like bolting the tower base plate down to the
> concrete has a lot more upside than downside, but WDIK?

Exactly, what do we know? If he's able to get a licensed, professional
engineer (who would know) to sign off on it I'd come within a radius of
1.5 times the tower height, otherwise I'd keep my distance.

This method sounds very dangerous. I could see putting some kind of
bearing or at least a recess so the base doesn't slide out from under
the rest of the tower but just plunking it down without any method of
keeping it on the concrete, yikes!

>
> Reminds me of a day back in the 1970's when a bunch of us were working on
> a 120-foot tower, guyed in three places, that held our repeater antenna.

> Due to events the details of which I have long since forgotten, all three
> of the guys on one leg became disconnected so that there was absolutely NO
> guying support on that side. One of the team was about 80 feet up the
> tower at the time. The tower curved over like a banana but stayed up, and
> we were able to re-install the guys before the tower came crashing down
> taking our friend with it. He did have to change his pants, though. :-\
>
> Pretty easy to imagine what would have happened if the tower base hadn't
> been fastened down...

Death, destruction, litigation... you should advise Mr. Baseless to
have a licensed engineer look over his installation, especially if
there's any insurance companies involved in any way.

But yeah, WDIK?
W8LNA

1887. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 12:51:26 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <j06Mi.83711$U24.37442@bignews5.bellsouth.net>
Source record: 36016

michel wrote:
> Hello all,
>
> As a new Novice amateur I am considering to build my first antenna.
> I know that starting with a j-pole is simple and easy. However. I see many
> plans on the internet.
>
> One of interest is the stacked 5/8 wave j-pole.
> I only see this in a stacked version. In a not stacked way I only see the
> half wave version with a quarter stub.
>
> Can a 5/8 wave length and 1/2 wave stub work as a real 5/8 wave antenna?
>
> Looking forward for any suggestion!
>
>
>

The homemade (very crude) 1/2 wave with a 1/4 wave matching section that I described in another article easily made great contacts from Pennsville, NJ (Wilmington, DE) to Philadelphia on simplex with ease. It was even indoors when I did it and I was running 10 watts or less. That is about a 30 mile distance. Mine was constructed of two pieces of #8 aluminum grounding wire stuck into two holes drilled into a piece of 2x4 as a base, sitting on my table a few feet away from my rig inside of the house. That was good enough for me to hold QSO's on FM and sideband with all of my Philadelphia friends (WA3RXE and several others).

Ed Cregger

1888. Re: Motorola ConvertaCom connector

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 12:58:08 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <A96Mi.10$VX3.5@nlpi070.nbdc.sbc.com>
Source record: 36018

Dan Yemiola AI8O wrote:
> Can anyone tell me what the end connector on the ConvertaCom cable is?
> Where can I get an RCA or PL259 adapter?

http://www.radioaccessories.com/storefront/prod.asp?catid=&subcatid=&productID=46492

says: "The Convertacom terminates to a Mini UHF Female."

http://www.pasternack.com/ probably has the adapter.
--
73, Cecil http://www.w5dxp.com

1889. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 13:12:27 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <%m6Mi.56301$YL5.53986@newssvr29.news.prodigy.net>
Source record: 36019

michel wrote:
> Can a 5/8 wave length and 1/2 wave stub work as a real 5/8 wave antenna?

A 5/8WL needs inductive reactance to resonate it.
An inductive stub will do that but a 1/2WL stub
will not. FYI, for a 2x5/8WL dipole, a 0.2 WL
series section of 450 ohm ladder-line is a pretty
good match to 50 ohms.
--
73, Cecil http://www.w5dxp.com

1890. Re: I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 13:16:30 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Oq6Mi.56304$YL5.4223@newssvr29.news.prodigy.net>
Source record: 36020

Rick (W-A-one-R-K-T) wrote:
> Is this a common way to install a tower, and does it make sense?

Some towers have a swivel to allow for twisting
but the base under the swivel is firmly embedded
in concrete.
--
73, Cecil http://www.w5dxp.com

1891. Re: I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 13:38:11 UTC
From: Jeff <jeff@local.host>
Message-ID: <4700f86c$0$1340$834e42db@reader.greatnowhere.com>
Source record: 36022

If the base of the tower were in a small pit then it might work, otherwise there is a huge danger that the base will kick out and the whole lot will come down.

73
Jeff

1892. Re: I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 13:38:14 UTC
From: John Passaneau <w3jxp@arrl.net>
Message-ID: <Xns99BC620BD54E3jxp16psuedu@128.118.141.40>
Source record: 36021

Cecil Moore <nospam@w5dxp.com> wrote in news:Oq6Mi.56304$YL5.4223
@newssvr29.news.prodigy.net:

> Rick (W-A-one-R-K-T) wrote:
>> Is this a common way to install a tower, and does it make sense?
>
> Some towers have a swivel to allow for twisting
> but the base under the swivel is firmly embedded
> in concrete.

Hi All:

I've seen profesonal towers put up that way, sorta. They had a single pin
that a hole in the flat tower base set over. The pressure of the guys keeps
the base on the concret pad and the pin keeps it from kicking out to the
side. With out the pin, it's going to come done sometime.

John Passaneau W3JXP

1893. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 14:31:43 UTC
From: michel
Message-ID: <470104ee$0$241$e4fe514c@news.xs4all.nl>
Source record: 36023

"Cecil Moore" <nospam@w5dxp.com> schreef in bericht
news:%m6Mi.56301$YL5.53986@newssvr29.news.prodigy.net...
> michel wrote:
>> Can a 5/8 wave length and 1/2 wave stub work as a real 5/8 wave antenna?
>
> A 5/8WL needs inductive reactance to resonate it.
> An inductive stub will do that but a 1/2WL stub
> will not. FYI, for a 2x5/8WL dipole, a 0.2 WL
> series section of 450 ohm ladder-line is a pretty
> good match to 50 ohms.

In a simple way... I have a vertical radiator of 2 x 5/8 wave length. That is serie with 450 ladder line one side connected to the radiated element and the other to a groundplane will work?

1894. Re: I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 14:42:53 UTC
From: "Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com>
Message-ID: <pan.2007.10.01.14.42.52.464344@from.qrz.com>
Source record: 36024

On Mon, 01 Oct 2007 13:38:14 +0000, John Passaneau wrote:

> I've seen profesonal towers put up that way, sorta. They had a single pin
> that a hole in the flat tower base set over.

Hmmm... Now that you mention it, I recall that the base plate had what looked like a capped tube rising from its center. Maybe that tube goes down over a pin of some kind that was embedded in the concrete.

I'll have to ask him about that.

1895. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 14:54:32 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <IS7Mi.9817$JD.201@newssvr21.news.prodigy.net>
Source record: 36025

michel wrote:
> In a simple way... I have a vertical radiator of 2 x 5/8 wave length. That
> is serie with 450 ladder line one side connected to the radiated element and
> the other to a groundplane will work?

I cannot tell from your description what is your
exact configuration. Is this it? (fixed font)

```
GndPlane--+ +-------------------------------------
| | 1.25WL vertical monopole
| |
| |
| | 450 ohm ladder-line
| | to transmitter
```

Simple vertical monopoles should not be longer than
5/8WL.
--
73, Cecil http://www.w5dxp.com

1896. Re: Connector repair

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 15:02:18 UTC
From: Bryan <plexus_sdc@yahoo.com>
Message-ID: <1191250938.709436.159150@o80g2000hse.googlegroups.com>
Source record: 36026

Jeff wrote:
> Jimmie D wrote:
> > Danny Richardson wrote:
> >> Jimmie D wrote:
>
> >>>I have a cable with a female N connector that the treads are damaged.
> >>>Could
> >>>someone tell me what size die to use to rethread it. I am familar with
> >>>alternate methods of cleaning up bunged up threads, this one really needs
> >>>a
> >>>die run over it.
>
> >>>Jimmie
>
> >> 5/8-24
>
> A replacement connector would be cheaper than a die, and if the threads are
> really that damaged what is the rest of the connector like??
>
> 73
> Jeff

McMaster-Carr (http://www.mcmaster.com/) sells 5/8-24NEF dies
(#26005A216) for $60.67. Ouch!
73,
Bryan WA7PRC

1897. Re: Connector repair

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 15:17:03 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <Pb8Mi.19525$lm1.520@trnddc01>
Source record: 36027

"Bryan" <plexus_sdc@yahoo.com> wrote in message
news:1191250938.709436.159150@o80g2000hse.googlegroups.com...
> Jeff wrote:
>> Jimmie D wrote:
>> > Danny Richardson wrote:
>> >> Jimmie D wrote:
>>
>> >>>I have a cable with a female N connector that the treads are damaged.
>> >>>Could
>> >>>someone tell me what size die to use to rethread it. I am familar with
>> >>>alternate methods of cleaning up bunged up threads, this one really
>> >>>needs
>> >>>a
>> >>>die run over it.
>>
>> >>>Jimmie
>>
>> >> 5/8-24
>>
>> A replacement connector would be cheaper than a die, and if the threads
>> are
>> really that damaged what is the rest of the connector like??
>>
>> 73
>> Jeff
>
> McMaster-Carr (http://www.mcmaster.com/) sells 5/8-24NEF dies
> (#26005A216) for $60.67. Ouch!
> 73,
> Bryan WA7PRC

Hi Bryan

If a guy was determined to chase damaged threads rather than replace the
connector, he could cut some slots in a steel nut that has the right
threads. A 5/8-24 nut is probably affordable.

Jerry

1898. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 16:02:02 UTC
From: michel
Message-ID: <470119a8$0$243$e4fe514c@news.xs4all.nl>
Source record: 36028

"Cecil Moore" <nospam@w5dxp.com> schreef in bericht
news:IS7Mi.9817$JD.201@newssvr21.news.prodigy.net...
> michel wrote:
>> In a simple way... I have a vertical radiator of 2 x 5/8 wave length.
>> That is serie with 450 ladder line one side connected to the radiated
>> element and the other to a groundplane will work?
>
> I cannot tell from your description what is your
> exact configuration. Is this it? (fixed font)
>
> GndPlane--+ +-------------------------------------
> | | 1.25WL vertical monopole
> | |
> | |
> | | 450 ohm ladder-line
> | | to transmitter
>
Hi Cecil,

In your first reply you talked about 2x 5/8 wave with 0,2 wave in serie to
50 ohm.
That is the same as in your example here? Or must we use it al the way up to
my transciever? I am still talking about 5/8 wave for 2 meters.

Michel

1899. Re: what homebrew HF antenna produces the most groundwave?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 16:36:05 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1191256565.817935.240750@k79g2000hse.googlegroups.com>
Source record: 36029

On Sep 30, 5:40 pm, Roy Lewallen <w...@eznec.com> wrote:
> Wim mentioned the high angle lobe you get with a 5/8 wave antenna. It
> produces a sky wave which can, if skip conditions are present, interfere
> with the ground wave signal and cause fading. This could be a very
> common and serious problem at higher frequencies where the ground wave
> is weaker and the sky wave stronger. You can reduce this by keeping the
> radiator height to 1/2 wavelength or less. Antennas in that height range
> don't have a high angle lobe, although they do produce some radiation at
> high angles. Radiators near a half wavelength in height produce less
> high angle radiation than shorter antennas, and they have more
> horizontal gain, so I'd think they would be best. I'm sure the AM
> broadcasters have other "anti-fading" techniques -- other newsgroup
> contributors would know much more about them than I do.
>
> Roy Lewallen, W7EL

One way to get more ground wave without introducing the high lobes is
to use a collinear vertical. Just how practical this is depends on
the frequency of operation and what you have to hold the antenna up.
For example, on 30MHz, you could pretty reasonably put a half-wave
above a half-wave or above a quarter wave. On 3.5MHz, that would be
much more difficult for most of us. Even on 20 meters, you might be
able to do a collinear vertical. I suppose that MW AM broadcasters
are unlikely to use a vertical collinear, but maybe one of the other
contributors with lots of broadcast antenna experience could comment
on that.

Cheers,
Tom

1900. Re: Mobile balun thoughts

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 16:43:11 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fdr836$1ija$1@f04n12.cac.psu.edu>
Source record: 36030

Larry Benko wrote:
> Michael Coslo wrote:
>
>> Should I put a 1:1 balun on the setup or not?
>>
>> - 73 de Mike KB3EIa -
>
> Mike,
>
> I'm sure there are a lot of opinions but here is what I do. Assuming
> your mobile antenna is pretty well matched and you are running 100W then
> the differential current in the coax will be about 1.4A. I have an
> industrial clamp-on current probe that connects to a small battery
> powered RF power meter (you can use something else) and I would measure
> the common mode current on the shield of the coax. If the common mode
> current was greater than 10% of the differential current in the coax
> (0.14A) on any band of interest then I would use a good quality 1:1
> balun. Why 10%? I have no real reason but I have done many mobile
> installations and have nearly 30K mobile qso's and have no equipment
> interactions or problems.

HI Larry,

As an update, and not specifically about th ebalun issue, I tweaked my system over the weekend.

Noise was an issue. When I first installed the antenna, it was on a fairly quiet day, RF wise. The unmodified Vitara pumped a slew of noise onto the radio. Without the engine running, I was seeing around S3-4 Noise. Turn the ignition on, and we're looking at S-9 worth of noise. Obviously not too cool.

I installed ferrite snap ons onto various lines, such as the alternator, the power lines to the rig, the power to the radiator fan. I then ran wire braid from the hood to ground, and grounded all the doors the same way.

Yesterday afternoon, I tried a test drive of the system. Much much quieter, although I hesitate to say exactly how much, since the band was a lot noisier to begin with.

I still have to ground the exhaust system, and try a ferrite on the fuel pump, which puts a little noise into the system. I still have to find the fuel pump, though. I'm assuming it is on the tank - but I think a call to Suzuki is in order.

40 meter operation was quite successful as far as the antenna working. Good reports all around.

As also expected, there were a few in-vehicle issues.

One minor one is that the oil pressure light turned into a nice little modulation indicator. This was whether the vehicle was running or not. I'll probably put a ferrite on the power line to it in hopes of knocking that out.

The other issue was that my voice would come out of the car stereo speakers. A bit distorted but legible. I'm not sure if this was the signal getting rectified somewhere or what. It would do this regardless of if the stereo was turned on or not- thought oddly, it would start only when the vehicle was turned on, and would go away gradually. At any rate, I'l have to be sure to get that one fixed.

Finally, and this is not noise related, but I put a capacity hat on the antenna as suggested by many. Being a homebrewer, I used what would best be described as a "big freakin' pizza pan", a 16 inch pan mounted upside down.

Turns out that I can adjust quite a bit lower in frequency than I expected, and I will definitely have to shorten something up to run higher than 20 meters.

- 73 de Mike KB3EIA -

1901. Corrosion on aluminum stake

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 16:55:52 UTC
From: Al Lorona <al_lorona@agilent.com>
Message-ID: <tE9Mi.3026$yc5.1518@nlpi069.nbdc.sbc.com>
Source record: 36031

I used an aluminum tent stake to temporarily stake a radial wire to the ground during some testing I was doing this summer.

After the test, I forgot to take it out of the ground.

Two weeks later I noticed it and reached down to pull it out of the ground. I pulled it out easily and was amazed to see only the top half of the stake in my hand. The thing had corroded almost all the way through right at ground level and the bottom half was still stuck in the ground.

How could it have completely corroded through an aluminum tent stake in just two weeks in my dirt?

Al W6LX

1902. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 17:16:05 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <pX9Mi.9878$JD.9786@newssvr21.news.prodigy.net>
Source record: 36032

michel wrote:
> In your first reply you talked about 2x 5/8 wave with 0,2 wave in series to
> 50 ohm.
> That is the same as in your example here?

No, my first reply was about a 2x5/8WL dipole fed in
the center with 0.2WL of ladder-line and no ground plane.

> Or must we use it al the way up to
> my transciever? I am still talking about 5/8 wave for 2 meters.

You can turn the 2x5/8WL center-fed dipole vertical
in which case, like a vertical center-fed 1/2WL dipole,
it doesn't need a ground plane.
--
73, Cecil http://www.w5dxp.com

1903. Re: Corrosion on aluminum stake

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 17:24:49 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fdrah1$11hi$2@f04n12.cac.psu.edu>
Source record: 36033

Al Lorona wrote:
> I used an aluminum tent stake to temporarily stake a radial wire to the
> ground during some testing I was doing this summer.
>
> After the test, I forgot to take it out of the ground.
>
> Two weeks later I noticed it and reached down to pull it out of the ground.
> I pulled it out easily and was amazed to see only the top half of the stake
> in my hand. The thing had corroded almost all the way through right at
> ground level and the bottom half was still stuck in the ground.
>
> How could it have completely corroded through an aluminum tent stake in just
> two weeks in my dirt?

I think you accidentally made a battery.

- 73 de Mike KB3EIA -

1904. Re: what homebrew HF antenna produces the most groundwave?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 17:47:50 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fdrbs8mhr1@aioe.org>
Source record: 36034

"K7ITM" wrote
> I suppose that MW AM broadcasters are unlikely to use a
> vertical collinear, but maybe one of the other contributors
>with lots of broadcast antenna experience could comment
> on that.

Almost all US AM broadcast stations use non-sectionalized vertical monopoles, but a few use a form of the Franklin antenna comprised of two collinear, end-fed verticals.

The current thought on this in broadcast circles is that the additional h-plane gain that provides over a 195-degree non-sectionalized monopole isn't worth the initial cost and the continuing need to check and adjust the power division and phasing between the sections of a Franklin.

RF

1905. Re: Corrosion on aluminum stake

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 18:22:53 UTC
From: Don Bruder <dakidd@sonic.net>
Message-ID: <47013afd$0$14131$742ec2ed@news.sonic.net>
Source record: 36035

In article <tE9Mi.3026$yc5.1518@nlpi069.nbdc.sbc.com>,
"Al Lorona" <al_lorona@agilent.com> wrote:

> I used an aluminum tent stake to temporarily stake a radial wire to the
> ground during some testing I was doing this summer.
>
> After the test, I forgot to take it out of the ground.
>
> Two weeks later I noticed it and reached down to pull it out of the ground.
> I pulled it out easily and was amazed to see only the top half of the stake
> in my hand. The thing had corroded almost all the way through right at
> ground level and the bottom half was still stuck in the ground.
>
> How could it have completely corroded through an aluminum tent stake in just
> two weeks in my dirt?
>
> Al W6LX

In a nutshell, you either made yourself a crude battery, or you
electroplated the dirt the stake was driven into with a layer of
aluminum. Precisely which one is the reality depends on, among other
things, soil pH, the material of your radial and whether or not your
radial was electrically hot (even if only a little) for whatever reason.
if I were a betting man, I'd put my money on "battery".

(See also "sacrificial anode" under the "boating" category)

--
Don Bruder - dakidd@sonic.net - If your "From:" address isn't on my whitelist,
or the subject of the message doesn't contain the exact text "PopperAndShadow"
somewhere, any message sent to this address will go in the garbage without my
ever knowing it arrived. Sorry... <http://www.sonic.net/~dakidd> for more info

1906. Re: what homebrew HF antenna produces the most groundwave?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 19:10:47 UTC
From: richardharrison@webtv.net
Message-ID: <16641-47014637-773@storefull-3254.bay.webtv.net>
Source record: 36036

Anonymous wrote:
"Of all the HF antennas one might reasonably make out of wire or
aluminum tubing, which produces the strongest groundwave?"

Vertical antennas make the strongest groundwaves.

Assuming you are confined to a single ground-mounted element of
reasonable height and complexity, Kraus in the 3rd edition of "Antennas"
gives a simple answer in Figure 16-35 on page 569. A 0.64-wavelength
tall vertical radiator produces the greatest field strength at one mile
in the direction of the horizon.

Best regards, Richard Harrison, KB5WZI

1907. Re: I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 19:36:06 UTC
From: John Passaneau <w3jxp@arrl.net>
Message-ID: <Xns99BC9EB9D70A2jxp16psuedu@128.118.141.40>
Source record: 36037

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in
news:pan.2007.10.01.14.42.52.464344@from.qrz.com:

> On Mon, 01 Oct 2007 13:38:14 +0000, John Passaneau wrote:
>
>> I've seen profesonal towers put up that way, sorta. They had a single
>> pin that a hole in the flat tower base set over.
>
> Hmmm... Now that you mention it, I recall that the base plate had what
> looked like a capped tube rising from its center. Maybe that tube
> goes down over a pin of some kind that was embedded in the concrete.
>
> I'll have to ask him about that.
>
>
HI again:

That's what it looked like.

John Passaneau W3JXP

1908. Re: what homebrew HF antenna produces the most groundwave?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 19:46:12 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fdriqadbc1@aioe.org>
Source record: 36038

"Richard Harrison" wrote
> Kraus in the 3rd edition of "Antennas" gives a simple answer
> in Figure 16-35 on page 569. A 0.64-wavelength tall vertical
> radiator produces the greatest field strength at one mile
> in the direction of the horizon.

...and subparts (c) and (e) of that figure clearly show the high-angle sidelobe centered at about 58 degrees elevation from an 0.64-lambda monopole that may cause self interference -- per Roy Lewallen's post earlier in this thread.

RF

1909. Re: I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 20:48:40 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fdrmf8lim2@news.jpl.nasa.gov>
Source record: 35841

Rick (W-A-one-R-K-T) wrote:
> On Mon, 01 Oct 2007 13:38:14 +0000, John Passaneau wrote:
>
>
>>I've seen profesonal towers put up that way, sorta. They had a single pin
>>that a hole in the flat tower base set over.
>
>
> Hmmm... Now that you mention it, I recall that the base plate had what
> looked like a capped tube rising from its center. Maybe that tube goes
> down over a pin of some kind that was embedded in the concrete.
>
> I'll have to ask him about that.
>

that would be what's known as a "pier pin" base, and, as noted, it
greatly reduces the torsional load on the tower. Whether the force
causing the tower to fail is torsional, I'm not sure. Guyed towers fail
by buckling from the compressional force exerted by the guys.
Obviously, putting another force on the tower in addition to the
compressive force is going to increase the load on at least some member
of the tower, and if failure of that member causes enough asymmetry to
get the buckle going, then it is an issue.

1910. MIMO and AAS

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 21:03:14 UTC
From: karthikbalaguru <karthikbalaguru79@gmail.com>
Message-ID: <1191272594.403002.105000@k79g2000hse.googlegroups.com>
Source record: 36039
Cross-posted to: sci.electronics.misc,comp.arch.embedded,sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

Hi,

What is the difference between multiple input multiple output (MIMO)
system and
Adaptive antenna system (AAS) ?

I find the WiMAX uses MIMO and AAS . But, the definition appears to be
the same.

Both the systems are exploiting more than one antenna to improve the
coverage and the system capacity.

I wonder why different naming convention for the same system !! :(:(
Is there any significant features/differences in MIMO and AAS ?

Thx in advans,
Karthik Balaguru

1911. Re: I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 21:36:14 UTC
From: Nate Bargmann <n0nb.DO.NOT.SPAM@ME.networksplus.net>
Message-ID: <pan.2007.10.01.21.36.18@ME.networksplus.net>
Source record: 35842

On Mon, 01 Oct 2007 13:48:40 -0700, Jim Lux wrote:

> that would be what's known as a "pier pin" base

Yup. Fairly common in commercial tower installations as I've seen
several. Seems to be unique in ham installations, though.

73, de Nate >>

--

"The optimist proclaims that we live in the best of all possible worlds,
the pessimist fears this is true."

1912. Re: I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 21:56:13 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <H96dnU98355g8ZzanZ2dnUVZ_u7inZ2d@bright.net>
Source record: 35843

Some commercial towers mount similar, but the ones I've seen have a
fairly large peg sticking out of the concrete and mates with the tower
base and the guys hold it all in place.

Scott

Rick (W-A-one-R-K-T) wrote:

> I went to visit a ham acquaintance of mine today. He is putting up a
> 100-foot tower with a large HF beam on top, guyed in three places.
>
> He is not fastening the base plate of the tower to the concrete base in
> any way... the tower just rests on the top of the concrete base, and the
> three sets of guys hold it in place.
>
> He explained that the main failure mode for towers is due to twisting in
> high winds with high-wind-load antennas, so by not fastening the base
> plate in any way and just letting it rest on the concrete, he allows it to
> rotate a few degrees if needed (by sliding on the concrete) and lessens or
> prevents rotational stress on the tower.
>
> I understand what he is saying but this is the first time in 45 years as
> a ham that I've ever heard of a tower being erected in this way.
>
> Is this a common way to install a tower, and does it make sense?
>
> Sure does seem to me like bolting the tower base plate down to the
> concrete has a lot more upside than downside, but WDIK?
>
> Reminds me of a day back in the 1970's when a bunch of us were working on
> a 120-foot tower, guyed in three places, that held our repeater antenna.
> Due to events the details of which I have long since forgotten, all three
> of the guys on one leg became disconnected so that there was absolutely NO
> guying support on that side. One of the team was about 80 feet up the
> tower at the time. The tower curved over like a banana but stayed up, and
> we were able to re-install the guys before the tower came crashing down
> taking our friend with it. He did have to change his pants, though. :-\
>
> Pretty easy to imagine what would have happened if the tower base hadn't
> been fastened down...
>

--
Scott
http://corbenflyer.tripod.com/

Gotta Fly or Gonna Die
Building RV-4 (Super Slow Build Version)

1913. Re: MIMO and AAS

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 22:04:16 UTC
From: karthikbalaguru <karthikbalaguru79@gmail.com>
Message-ID: <1191276256.648664.172590@19g2000hsx.googlegroups.com>
Source record: 35844
Cross-posted to: sci.electronics.misc,comp.arch.embedded,sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On Oct 2, 2:03 am, karthikbalaguru <karthikbalagur...@gmail.com>
wrote:
> Hi,
>
> What is the difference between multiple input multiple output (MIMO)
> system and
> Adaptive antenna system (AAS) ?
>
> I find the WiMAX uses MIMO and AAS . But, the definition appears to be
> the same.
>
> Both the systems are exploiting more than one antenna to improve the
> coverage and the system capacity.
>
> I wonder why different naming convention for the same system !! :(:(
> Is there any significant features/differences in MIMO and AAS ?
>
> Thx in advans,
> Karthik Balaguru

Hi,

I got some info from internet.
There are differences between MIMO and AAS Antenna Technologies:):)

It appears that cost-effectiveness comes in terms of the antenna and
MIMO (Multiple Input, Multiple Output) and AAS (Adaptive Antenna
System) are
competitors.

MIMO delivers the same coverage as AAS

MIMO delivers higher capacity than AAS

MIMO is lower in complexity and cost than AAS

MIMO is more scalable than AAS. MIMO is more predictable in
performance
and can grow through additional sectors and/or additional antennas

MIMO works well in all environments (rural, suburban, urban),
switching modes to deliver users the best experience.

MIMO outperforms AAS for mobile applications: MIMO maintains
performance at speed and provides a predictable environment for easier
and

more reliable hand-offs.

MIMO is the basis for all 4G plans- widespread investment in
developing
MIMO technologies will ensure advantages are maintained.

So, it looks like in all aspects, MIMO is equal to or superior to AAS

Refer - http://www.nortel.com/solutions/wimax/collateral/nn118160.pdf

Thx,
Karthik Balaguru

1914. Re: MIMO and AAS

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 22:10:17 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fdrr89fbt2@news.jpl.nasa.gov>
Source record: 35849
Cross-posted to: sci.electronics.misc,comp.arch.embedded,sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

karthikbalaguru wrote:
> Hi,
>
> What is the difference between multiple input multiple output (MIMO)
> system and
> Adaptive antenna system (AAS) ?
>
> I find the WiMAX uses MIMO and AAS . But, the definition appears to be
> the same.

No..

MIMO uses the fact that if you have multiple receivers and transmitters at each end of the link, the properties of the paths are uncorrelated to some degree, so you can spread your data across the multiple paths, reducing the bit rate on any one path. One use would be to use some sort of FEC coding, transmitting multiple bits for each data bit to achieve a lower overall bit error rate (after coding/decoding).

AAS is more like adaptive beamforming

In the limit, they are similar.

>
> Both the systems are exploiting more than one antenna to improve the
> coverage and the system capacity.
>
> I wonder why different naming convention for the same system !! :(:(
> Is there any significant features/differences in MIMO and AAS ?
>
> Thx in advans,
> Karthik Balaguru
>

1915. Re: I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 22:31:31 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99BD56ADCCB1Fnonenowhere@61.9.191.5>
Source record: 35845

Jim Lux <james.p.lux@jpl.nasa.gov> wrote in
news:fdrmf8lim2@news.jpl.nasa.gov:

...
> that would be what's known as a "pier pin" base, and, as noted, it
> greatly reduces the torsional load on the tower. Whether the force
> causing the tower to fail is torsional, I'm not sure. Guyed towers
> fail by buckling from the compressional force exerted by the guys.

The vertical elements of a tower framework should take their load in line with the element. They are slender elements which are tied in by bracing to prevent buckling.

It seems to me that in a typical construction where the end of that vertical element in each section is not free to hinge, that twisting of the section deforms the vertical element and would assist buckling if the downwards force in the element is very large... as it is on very large structures.

(If you read the USCG manual on towers, they are obsessed with ensuring that not only is the tower vertical, but that each vertical element is vertical (ie twist within specified limits.)

I wonder about the benefit in shorter structures, but can see that dynamic forces caused by rotator brakes trying to instantly stop a rotating beam might be better accommodated by the pier pin base.

For hints on amateur applications of towers, look at these pics:

(note the extension of the winch handle)

http://www.users.bigpond.com/vk3bjm/gallery_files/image016.jpg

and the counterweight in more detail:
http://www.users.bigpond.com/vk3bjm/gallery_files/image018.jpg

Owen

1916. Re: Connector repair

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 22:33:38 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <470175b7$0$20633$4c368faf@roadrunner.com>
Source record: 35846

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:Pb8Mi.19525$Im1.520@trnddc01...
>
> "Bryan" <plexus_sdc@yahoo.com> wrote in message
> news:1191250938.709436.159150@o80g2000hse.googlegroups.com...
>> Jeff wrote:
>>> Jimmie D wrote:
>>> > Danny Richardson wrote:
>>> >> Jimmie D wrote:
>>>
>>> >>>I have a cable with a female N connector that the treads are damaged.
>>> >>>Could
>>> >>>someone tell me what size die to use to rethread it. I am familar
>>> >>>with
>>> >>>alternate methods of cleaning up bunged up threads, this one really
>>> >>>needs
>>> >>>a
>>> >>>die run over it.
>>>
>>> >>>Jimmie
>>>
>>> >> 5/8-24
>>>
>>> A replacement connector would be cheaper than a die, and if the threads
>>> are
>>> really that damaged what is the rest of the connector like??
>>>
>>> 73
>>> Jeff
>>
>> McMaster-Carr (http://www.mcmaster.com/) sells 5/8-24NEF dies
>> (#26005A216) for $60.67. Ouch!
>> 73,
>> Bryan WA7PRC
>
>
> Hi Bryan
>
> If a guy was determined to chase damaged threads rather than replace the
> connector, he could cut some slots in a steel nut that has the right
> threads. A 5/8-24 nut is probably affordable.
>
> Jerry
>

I too found they were rather expensive thats when I remembered my neighbor was a machinist. She wouldnt let me borrow her die but she very kindly rethreaded the connector for free.

Jimmie

1917. Re: MIMO and AAS

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 22:33:46 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r0t2g39s9bnla0if5h0mbt7cct71p9juhl@4ax.com>
Source record: 35847
Cross-posted to: sci.electronics.misc,comp.arch.embedded,sci.electronics.basics,rec.radio.shortwave,rec.radio.amateur.antenna

On Mon, 01 Oct 2007 15:04:16 -0700, karthikbalaguru
<karthikbalaguru79@gmail.com> wrote:

>MIMO delivers the same coverage as AAS

Hi Karthik,

Only with the qualification that AAS may be steered to the same points
of coverage of MIMO - and that is not always assured.

>MIMO delivers higher capacity than AAS

What is capacity? There are counter-arguments (depending on
capacity's meaning, there are several) that would invert this claim.

>MIMO is lower in complexity and cost than AAS

An engineering system solution is not always about one component cost.

>MIMO is more scalable than AAS. MIMO is more predictable in
>performance
>and can grow through additional sectors and/or additional antennas

You should study the information and skip the claims you've heard.

>MIMO works well in all environments (rural, suburban, urban),
>switching modes to deliver users the best experience.

This is not an antenna issue.

>MIMO outperforms AAS for mobile applications: MIMO maintains
>performance at speed and provides a predictable environment for easier
>and
>more reliable hand-offs.

If AAS is boresight along a transportation corridor, this is no longer
true.

>MIMO is the basis for all 4G plans- widespread investment in
>developing
>MIMO technologies will ensure advantages are maintained.

It's only advantage in this list you've constructed.

>So, it looks like in all aspects, MIMO is equal to or superior to AAS

Look again - your PRO MIMO statements are far too under qualified.

73's
Richard Clark, KB7QHC

1918. Re: I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 22:41:31 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13g2tsq28uio949@corp.supernews.com>
Source record: 35848

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in message
news:pan.2007.10.01.04.51.34.113123@from.qrz.com...
>
> I went to visit a ham acquaintance of mine today. He is putting up a
> 100-foot tower with a large HF beam on top, guyed in three places.
>
> He is not fastening the base plate of the tower to the concrete base in
> any way... the tower just rests on the top of the concrete base, and the
> three sets of guys hold it in place.
>

Somewhere on the internet was a very detailed computer simulation of this. The base is just made so it can not kick out. You have a bending force and a shearing force on the base of a tower. If the base can wiggle some, it will take more stress than if the base is bolted down or placed in cement. It also gets on the climbers nerves when the tower does its shifting.

You can think of this as placing something in the sand or dirt like a yard stick. Place it a couple inches in sand and it will bend way over , place a couple of inches in a crack between some bricks that can not move and start bending it at the top, It will soon snap .

1919. Re: I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 22:51:11 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fdrtkv$9bn$1@news.jpl.nasa.gov>
Source record: 35850

Owen Duffy wrote:
> Jim Lux <james.p.lux@jpl.nasa.gov> wrote in
> news:fdrmf8lim2@news.jpl.nasa.gov:
>
> ...
>
>>that would be what's known as a "pier pin" base, and, as noted, it
>>greatly reduces the torsional load on the tower. Whether the force
>>causing the tower to fail is torsional, I'm not sure. Guyed towers
>>fail by buckling from the compressional force exerted by the guys.
>
>
> The vertical elements of a tower framework should take their load in line
> with the element. They are slender elements which are tied in by bracing
> to prevent buckling.
>
> It seems to me that in a typical construction where the end of that
> vertical element in each section is not free to hinge, that twisting of
> the section deforms the vertical element and would assist buckling if the
> downwards force in the element is very large... as it is on very large
> structures.

Actually, you'd look at the diagonal braces, too. On several theatrical truss designs, the bending load limit is set by the compression buckling of the diagonal braces, not the tension or compression of the main tubes. A torsional load will put a bending load on the vertical main tubes, but a longitudinal load on the diagonal braces (compression or tension depending on which direction they go). probably also a bending moment on the diagonal struts because they're welded joints.

1920. Re: Pier Pin vs Embedded Base (Was never heard of installing a tower this way)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 23:28:37 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <JofMi.113600$xZ2.11283@newsfe10.phx>
Source record: 35851

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message
news:fdrmf8lim2@news.jpl.nasa.gov...
> Rick (W-A-one-R-K-T) wrote:
>> On Mon, 01 Oct 2007 13:38:14 +0000, John Passaneau wrote:
>>
>>
>>>I've seen profesonal towers put up that way, sorta. They had a single pin
>>>that a hole in the flat tower base set over.
>>
>>
>> Hmmm... Now that you mention it, I recall that the base plate had what
>> looked like a capped tube rising from its center. Maybe that tube goes
>> down over a pin of some kind that was embedded in the concrete.
>>
>> I'll have to ask him about that.
>>
>
> that would be what's known as a "pier pin" base, and, as noted, it greatly
> reduces the torsional load on the tower. Whether the force causing the
> tower to fail is torsional, I'm not sure. Guyed towers fail by buckling
> from the compressional force exerted by the guys. Obviously, putting
> another force on the tower in addition to the compressive force is going
> to increase the load on at least some member of the tower, and if failure
> of that member causes enough asymmetry to get the buckle going, then it is
> an issue.
>

Interesting and long discussion of Pier Pin vs Embedded Base at QTH.COM
http://www.qth.com/ka9fox/pier_pin_vs_embedded_base.txt

The Shadow who has never owned a tower but has ARRL Honor Roll -- brag
brag. Verticals do work

1921. Re: I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-01 23:35:32 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <ZMudnbB5noKhGZzanZ2dnUVZ_jydnZ2d@comcast.com>
Source record: 35852

"Scott" <acepilot@bloomer.net> wrote in message
news:H96dnU98355g8ZzanZ2dnUVZ_u7inZ2d@bright.net...
> Some commercial towers mount similar, but the ones I've seen have a fairly
> large peg sticking out of the concrete and mates with the tower base and
> the guys hold it all in place.
>
> Scott
>
Some of these are vertical radiators that need to be insulated from ground.
I have seen pictures of such where the tower actually came to a point at the
bottom (WLW?).

Tam/WB2TT

1922. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 00:15:17 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fds2idmuc1@news.service.uci.edu>
Source record: 35853

michel wrote:
> Hello all,
>
> As a new Novice amateur I am considering to build my first antenna.
> I know that starting with a j-pole is simple and easy. However. I see many
> plans on the internet.
>
> One of interest is the stacked 5/8 wave j-pole.
> I only see this in a stacked version. In a not stacked way I only see the
> half wave version with a quarter stub.
>
> Can a 5/8 wave length and 1/2 wave stub work as a real 5/8 wave antenna?
>
> Looking forward for any suggestion!

I don't know what construction technique you have in mind, but I
prefer to build them from 1/2" copper pipe. If that's what you intend
to do, then just cut the vertical radiator 5/8ths instead of 1/2
lambda. Build the rest the same (1/4 wave stub). Attach your coax to
the stub section using hose clamps, and tune by sliding the clamps up
or down until you achieve best SWR. Works great.

ac6xg

1923. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 01:14:56 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fds628poe1@news.service.uci.edu>
Source record: 35854

Cecil Moore wrote:

> There is some confusion between DC circuits and
> distributed RF networks.

No comment.

> In a DC circuit, the
> current is the same throughout the circuit.

That's true only for a simple series circuit. And it's true for RF
as well.

> In
> a distributed RF network, the current is usually
> *NOT* the same throughout the network.

The same is true for a DC network.

> One can
> put one amp of current into a buried radial and
> measure zero amps from some point outward.

> In particular, when dealing with RF EM waves, the
> H-field to which the current is proportional in
> a transmission line is attenuated by the same
> attenuation factor as is the E-field to which
> the voltage is proportional. Please reference
> the transmission line equations to verify that
> fact.

> Such is easy to see. If one has a flat Z0=50 ohm
> transmission line with 100 watts in and 50 watts
> out, there is 1.414 amps in and 1.0 amp out because
> the ratio of voltage to current is fixed at 50 ohms.
> The traveling-wave current in an EM wave in a
> transmission line (or in a radial in lossy earth)
> is attenuated exactly as much as the voltage.

Note: according to Ohms law, current scales directly with voltage and
inversely with resistance.

ac6xg

1924. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 04:09:17 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <NvjMi.53620$Um6.48314@newssvr12.news.prodigy.net>
Source record: 35855

Jim Kelley wrote:
>> In a DC circuit, the
>> current is the same throughout the circuit.
>
> That's true only for a simple series circuit. And it's true for RF as
> well.

A foot of wire with reflections at one GHz has
the same current throughout the circuit?
--
73, Cecil http://www.w5dxp.com

1925. Re: Corrosion on aluminum stake

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 05:15:18 UTC
From: Al Lorona <al_lorona@agilent.com>
Message-ID: <LtkMi.2052$hI7.1375@newssvr17.news.prodigy.net>
Source record: 35856

Thanks for your replies. I should have made clear that I only left the stake in the ground. There was no radial, nothing else connected to it for those two weeks.

My soil is pretty good (fertile) soil. It's loamy, dry, and dark. I've never measured the conductivity of it. It didn't take too much to drive it into the ground, just a few whacks of my hammer.

Weird!

Al W6LX

1926. Re: I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 05:43:24 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99BD9FE6ACE41nonenowhere@61.9.191.5>
Source record: 35857

Jim Lux <james.p.lux@jpl.nasa.gov> wrote in
news:fdrtkv$9bn$1@news.jpl.nasa.gov:

> Actually, you'd look at the diagonal braces, too. On several
> theatrical truss designs, the bending load limit is set by the
> compression buckling of the diagonal braces, not the tension or
> compression of the main tubes. A torsional load will put a bending
> load on the vertical main tubes, but a longitudinal load on the
> diagonal braces (compression or tension depending on which direction
> they go). probably also a bending moment on the diagonal struts
> because they're welded joints.

Jim, thinking about this a bit more...

There are two broad ways to fix the bottom of the tower (if it fixed).

One is to embed the bottom section in concrete, the other is to have a plate on the bottom tower section and fix it to threaded studs / framework drilled or embedded in the concrete base.

The second allows for find adjustment of the plumb of the first section (eg using nuts above and below the plate) wheras the first method does not.

I wonder what the preload on the lower tower sections is if the first section is fixed and not plumb (for whatever reason). Perhaps that is an aspect that the design engineer cannot quantify, so the easy way out is to specifiy pier pin mounting as (properly done) it should eliminate bending moments caused by lack of plumb of a fixed base section.

Owen

1927. Re: Connector repair

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 10:44:06 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <wWNsoeJ2DiAHFwh1@g3ohx.demon.co.uk>
Source record: 35858

In message <470175b7$0$20633$4c368faf@roadrunner.com>, Jimmie D
<GFENDER@carolina.rr.com> writes
>
>"Jerry Martes" <j.jmartes@verizon.net> wrote in message
>news:Pb8Mi.19525$Im1.520@trnddc01...
>>
>> "Bryan" <plexus_sdc@yahoo.com> wrote in message
>> news:1191250938.709436.159150@o80g2000hse.googlegroups.com...
>>> Jeff wrote:
>>>> Jimmie D wrote:
>>>> > Danny Richardson wrote:
>>>> >> Jimmie D wrote:
>>>>
>>>> >>>I have a cable with a female N connector that the treads are damaged.
>>>> >>>Could
>>>> >>>someone tell me what size die to use to rethread it. I am familar
>>>> >>>with
>>>> >>>alternate methods of cleaning up bunged up threads, this one really
>>>> >>>needs
>>>> >>>a
>>>> >>>die run over it.
>>>>
>>>> >>>Jimmie
>>>>
>>>> >> 5/8-24
>>>>
>>>> A replacement connector would be cheaper than a die, and if the threads
>>>> are
>>>> really that damaged what is the rest of the connector like??
>>>>
>>>> 73
>>>> Jeff
>>>
>>> McMaster-Carr (http://www.mcmaster.com/) sells 5/8-24NEF dies
>>> (#26005A216) for $60.67. Ouch!
>>> 73,
>>> Bryan WA7PRC
>>
>>
>> Hi Bryan
>>
>> If a guy was determined to chase damaged threads rather than replace the
>> connector, he could cut some slots in a steel nut that has the right
>> threads. A 5/8-24 nut is probably affordable.

>>
>> Jerry
>>
>
>I too found they were rather expensive thats when I remembered my neighbor
>was a machinist. She wouldnt let me borrow her die but she very kindly
>rethreaded the connector for free.
>

This reminds me of several folk songs, full of double-entendres!
--
Ian

1928. Re: Connector repair

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 11:38:42 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <55qMi.2062$hl7.101@newssvr17.news.prodigy.net>
Source record: 35859

Ian Jackson wrote:
> This reminds me of several folk songs, full of double-entendres!

"I've Got The Horse And You've Got The Saddle" :-)
--
73, Cecil http://www.w5dxp.com

1929. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 14:21:34 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <1191334894.956808.313650@o80g2000hse.googlegroups.com>
Source record: 35860

On Oct 1, 9:09 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> Jim Kelley wrote:
> >> In a DC circuit, the
> >> current is the same throughout the circuit.
>
> > That's true only for a simple series circuit. And it's true for RF as
> > well.
>
> A foot of wire with reflections at one GHz has
> the same current throughout the circuit?
> --
> 73, Cecil http://www.w5dxp.com

A simple series circuit can be expected to behave as a simple series
circuit. Other circuits can be expected to behave differently. Which
do you think applies?

ac6xg

1930. Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 15:58:46 UTC
From: "Kenneth Grimm, K4XL" <grimm@sbc.edu>
Message-ID: <q0n4g3lf1b1kg51mquhq63jqddljum9fam@4ax.com>
Source record: 35861

I'm installing a new tower and bought, as part of the package, the grounding kit. This consists of four 10 ft copper clad ground rods, plus all the accessories needed to connect them to the tower.

My problem is that after about 5 feet of good old red clay I hit solid rock. I'm tempted to cut the 10 ft rods in half and simply have eight 5 ft rods. Since this is the only practical alternative that I can see.

Will the eight 5 ft rods give me the same "ground" as the four 10 ft rods? Or, do I need to add even more 5 ft rods to achieve the same ground? (I knew I should have bought that Megger at the hamfest.)

Opinions welcomed. Empirically derived evidence treasured! 8*)

Ken K4XL
k4xl@arrl.net

*** BoatAnchor Manual Archive ***
On the web at http://bama.sbc.edu and http://bama.edebris.com
FTP site info: bama.sbc.edu login: anonymous p/w: youremailadr

1931. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 17:15:46 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <61vMi.1$wF3.0@nlpi061.nbdc.sbc.com>
Source record: 35862

Jim Kelley wrote:
> Cecil Moore wrote:
>> A foot of wire with reflections at one GHz has
>> the same current throughout the circuit?
>
> A simple series circuit can be expected to behave as a simple series
> circuit. Other circuits can be expected to behave differently. Which
> do you think applies?

An *ordinary prudent man* would think that one foot
of wire is a "simple series circuit" and it is in a
DC circuit. If as you say, the current in an RF circuit
is the same throughout, why does the current vary
every inch in a circuit with reflections?
--
73, Cecil http://www.w5dxp.com

1932. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 17:21:42 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <v3v4g3l71fdivhs2spjogj60vr7tq4v55p@4ax.com>
Source record: 35863

On Tue, 02 Oct 2007 11:58:46 -0400, "Kenneth Grimm, K4XL"
<grimm@sbc.edu> wrote:

>Will the eight 5 ft rods give me the same "ground" as the four 10 ft
>rods? Or, do I need to add even more 5 ft rods to achieve the same
>ground?

Hi Ken,

Oddly enough, you could as easily lay the rods out in a shallow trench (say, a foot deep) and get the same grounding, if not better. The only rule of thumb that might be observed is to not have them in proximity to one or the other. Proximity would mean about five feet in 10 foot parallel trenches.

However, to satisfy convention: cut them in half (or research the archives here for rotary hammers) and keep them isolated, one from the other, by at least three feet.

73's
Richard Clark, KB7QHC

1933. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 17:26:26 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <OYidnSlO0OyP4p_aRVnysAA@bt.com>
Source record: 35864

"Kenneth Grimm, K4XL" <grimm@sbc.edu> wrote in message
news:q0n4g3lf1b1kg51mquhq63jqddljum9fam@4ax.com...
> I'm installing a new tower and bought, as part of the package, the
> grounding kit. This consists of four 10 ft copper clad ground rods,
> plus all the accessories needed to connect them to the tower.
>
> My problem is that after about 5 feet of good old red clay I hit solid
> rock. I'm tempted to cut the 10 ft rods in half and simply have eight
> 5 ft rods. Since this is the only practical alternative that I can
> see.
>
> Will the eight 5 ft rods give me the same "ground" as the four 10 ft
> rods? Or, do I need to add even more 5 ft rods to achieve the same
> ground? (I knew I should have bought that Megger at the hamfest.)
>
> Opinions welcomed. Empirically derived evidence treasured! 8*)
>
>
> Ken K4XL
> k4xl@arrl.net
>
> *** BoatAnchor Manual Archive ***
> On the web at http://bama.sbc.edu and http://bama.edebris.com
> FTP site info: bama.sbc.edu login: anonymous p/w: youremailadr

Ken

This very subject was covered at some length not so long ago. The consensus was that solid rock does not make a very good earth. Driving the rods in at an angle to get the full 10 feet under the soil is probably going to be adequate. If you are concerned that the earth is not good enough, add some lengths of thick, bare copper wire buried in the soil and conected back to a common earth point. The rods are mainly there to provide a dissipation path for lightning if it should hit the tower.

Mike G0ULI

1934. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 17:33:11 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fdtvcgaif1@news.service.uci.edu>
Source record: 35866

Cecil Moore wrote:
> Jim Kelley wrote:
>
>> Cecil Moore wrote:
>>
>>> A foot of wire with reflections at one GHz has
>>> the same current throughout the circuit?
>>
>>
>> A simple series circuit can be expected to behave as a simple series
>> circuit. Other circuits can be expected to behave differently. Which
>> do you think applies?
>
>
> An *ordinary prudent man* would think that one foot
> of wire is a "simple series circuit" and it is in a
> DC circuit.

Most ordinary prudent men that I know wouldn't characterize a one foot
length of wire as a series circuit.

ac6xg

1935. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 17:38:14 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <amvMi.4$wF3.1@nlpi061.nbdc.sbc.com>
Source record: 35865

Kenneth Grimm, K4XL wrote:
> Opinions welcomed. Empirically derived evidence treasured! 8*)

Think outside the box - drive them into the ground
at a 30 degree angle.
--
73, Cecil http://www.w5dxp.com

1936. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 17:49:32 UTC
From: michel
Message-ID: <47028459$0$236$e4fe514c@news.xs4all.nl>
Source record: 35867

>
> I don't know what construction technique you have in mind, but I prefer to
> build them from 1/2" copper pipe. If that's what you intend to do, then
> just cut the vertical radiator 5/8ths instead of 1/2 lambda. Build the
> rest the same (1/4 wave stub). Attach your coax to the stub section using
> hose clamps, and tune by sliding the clamps up or down until you achieve
> best SWR. Works great.
>
> ac6xg

Should it be that simple? I understood from other posters that it will not work with the 1/4 wave stub..
Maybe I must try it myself?

What I found is 2x5/8 wave with a 1/4 wave stub.. ?

1937. FYI: RF Calculator

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 18:19:39 UTC
From: The Shadow <Repose@Zilch.com>
Message-ID: <tYvMi.198200$zz2.22289@newsfe12.phx>
Source record: 35868

Just found this
http://www.bird-technologies.com/techapps/tools/rfcalc_3-6-06.xls

Lamont

1938. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 18:54:03 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <470293be$0$24305$4c368faf@roadrunner.com>
Source record: 35869

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:v3v4g3l71fdivhs2spjogj60vr7tq4v55p@4ax.com...
> On Tue, 02 Oct 2007 11:58:46 -0400, "Kenneth Grimm, K4XL"
> <grimm@sbc.edu> wrote:
>
>>Will the eight 5 ft rods give me the same "ground" as the four 10 ft
>>rods? Or, do I need to add even more 5 ft rods to achieve the same
>>ground?
>
> Hi Ken,
>
> Oddly enough, you could as easily lay the rods out in a shallow trench
> (say, a foot deep) and get the same grounding, if not better. The
> only rule of thumb that might be observed is to not have them in
> proximity to one or the other. Proximity would mean about five feet
> in 10 foot parallel trenches.
>
> However, to satisfy convention: cut them in half (or research the
> archives here for rotary hammers) and keep them isolated, one from the
> other, by at least three feet.
>
> 73's
> Richard Clark, KB7QHC

I think the rule of thunb is to separate ground rounds by an amount equal to
their length.

Jimmie

1939. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 18:55:57 UTC
From: "Kenneth Grimm, K4XL" <grimm@sbc.edu>
Message-ID: <vo45g39mu7hn4rmvl2rr6l4pu4lcpejpbk@4ax.com>
Source record: 35870

On Tue, 02 Oct 2007 10:21:42 -0700, Richard Clark <kb7qhc@comcast.net>
wrote:

>Oddly enough, you could as easily lay the rods out in a shallow trench
>(say, a foot deep) and get the same grounding, if not better.

followed by comments from Mike and Cecil suggesting driving the rods
at an angle.

Thanks to all of you for encouraging me to think outside the box! Now
all I have to do is find a sledge with a 30 degree adjustment on it.
Actually, most of the nails I've driven have gone in at about that
angle, so I shouldn't have any trouble at all. 8*)

Thanks again. 73,

Ken K4XL
k4xl@arrl.net

*** BoatAnchor Manual Archive ***
On the web at http://bama.sbc.edu and http://bama.edebris.com
FTP site info: bama.sbc.edu login: anonymous p/w: youremailadr

1940. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 19:06:29 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <470296a9$0$18941$4c368faf@roadrunner.com>
Source record: 35871

"michel" <nomail@@nomail.com> wrote in message
news:4700ddf0$0$245$e4fe514c@news.xs4all.nl...
> Hello all,
>
> As a new Novice amateur I am considering to build my first antenna.
> I know that starting with a j-pole is simple and easy. However. I see many
> plans on the internet.
>
> One of interest is the stacked 5/8 wave j-pole.
> I only see this in a stacked version. In a not stacked way I only see the
> half wave version with a quarter stub.
>
> Can a 5/8 wave length and 1/2 wave stub work as a real 5/8 wave antenna?
>
> Looking forward for any suggestion!
>
>
>

The small theroretical gain advantage that a 5/8wl radiator has over a 1/2wl radiator is dependent on it having a very good counterpoise. However one may be able to fabricate a 5/8wl antenna with a couterpoise matched to the feedline with a stub made of metal tubing.

Jimmie

1941. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 19:23:06 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fdu5qj$fo5$1@news.service.uci.edu>
Source record: 35874

michel wrote:
>>I don't know what construction technique you have in mind, but I prefer to
>>build them from 1/2" copper pipe. If that's what you intend to do, then
>>just cut the vertical radiator 5/8ths instead of 1/2 lambda. Build the
>>rest the same (1/4 wave stub). Attach your coax to the stub section using
>>hose clamps, and tune by sliding the clamps up or down until you achieve
>>best SWR. Works great.
>>
>>ac6xg
>
>
>
> Should it be that simple?

It can be.

> I understood from other posters that it will not
> work with the 1/4 wave stub..

For some posters, a view of the forest is obscured by trees. A j-pole
is a quarter wave stub with a 1/2 wave (or longer) radiator attached
to one side of the open end. The feed is connected nearer to the
shorted end of the stub. Build it and they (the QSOs) will come. Get
it up as high above the roof as you can.

ac6xg

1942. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 19:27:47 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1191353267.209788.281710@w3g2000hsg.googlegroups.com>
Source record: 35872

On Oct 2, 10:33 am, Jim Kelley <jwkel...@uci.edu> wrote:
> Cecil Moore wrote:
> > Jim Kelley wrote:
>
> >> Cecil Moore wrote:
>
> >>> A foot of wire with reflections at one GHz has
> >>> the same current throughout the circuit?
>
> >> A simple series circuit can be expected to behave as a simple series
> >> circuit. Other circuits can be expected to behave differently. Which
> >> do you think applies?
>
> > An *ordinary prudent man* would think that one foot
> > of wire is a "simple series circuit" and it is in a
> > DC circuit.
>
> Most ordinary prudent men that I know wouldn't characterize a one foot
> length of wire as a series circuit.
>
> ac6xg

The fact that it's described as having a physical dimension suggests
that the physical extent matters. I don't know what an "ordinary
prudent man" is, but I suppose most people I stopped on the street
wouldn't have a clue what I was talking about and their eyes would
kind of glaze over with the mention of "wire" and "circuit."

Cheers,
Tom

(presently playing with circuits below 100MHz where 1mm can make a
huge difference in performance...who finds folk who say we don't
understand such things as distributed circuits deeply offensive,
especially when they make it abundantly clear they don't understand
such circuits themselves...)

1943. Re: I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 19:28:12 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <47029bbe$0$32544$4c368faf@roadrunner.com>
Source record: 35873

"Rick (W-A-one-R-K-T)" <get.my.email@from.qrz.com> wrote in message
news:pan.2007.10.01.04.51.34.113123@from.qrz.com...
>
> I went to visit a ham acquaintance of mine today. He is putting up a
> 100-foot tower with a large HF beam on top, guyed in three places.
>
> He is not fastening the base plate of the tower to the concrete base in
> any way... the tower just rests on the top of the concrete base, and the
> three sets of guys hold it in place.
>
> He explained that the main failure mode for towers is due to twisting in
> high winds with high-wind-load antennas, so by not fastening the base
> plate in any way and just letting it rest on the concrete, he allows it to
> rotate a few degrees if needed (by sliding on the concrete) and lessens or
> prevents rotational stress on the tower.
>
> I understand what he is saying but this is the first time in 45 years as
> a ham that I've ever heard of a tower being erected in this way.
>
> Is this a common way to install a tower, and does it make sense?
>
> Sure does seem to me like bolting the tower base plate down to the
> concrete has a lot more upside than downside, but WDIK?
>
> Reminds me of a day back in the 1970's when a bunch of us were working on
> a 120-foot tower, guyed in three places, that held our repeater antenna.
> Due to events the details of which I have long since forgotten, all three
> of the guys on one leg became disconnected so that there was absolutely NO
> guying support on that side. One of the team was about 80 feet up the
> tower at the time. The tower curved over like a banana but stayed up, and
> we were able to re-install the guys before the tower came crashing down
> taking our friend with it. He did have to change his pants, though. :-\
>
> Pretty easy to imagine what would have happened if the tower base hadn't
> been fastened down...
>

I would never do this intentionally but I know of a tower that had its nuts
removed(vandalism) and it stayed up for years like that unti it was finally
demolished. The first requirment on the demolistion procedure was to replace
the nuts. I wonder why because that used small explosive charges to shear
the guy wires on two sides. I t would have made you cry to see all that
tower warped after it fell.

Jimmie

1944. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 20:04:51 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <DvxMi.5660$6p6.381@newssvr25.news.prodigy.net>
Source record: 35875

Jim Kelley wrote:
>
> Cecil Moore wrote:
>> An *ordinary prudent man* would think that one foot
>> of wire is a "simple series circuit" and it is in a
>> DC circuit.
>
> Most ordinary prudent men that I know wouldn't characterize a one foot
> length of wire as a series circuit.

More silly word games - when it is in a DC circuit
the current is constant. When it exists in a simple
series GHz circuit with reflections, the current
is not constant.
--
73, Cecil http://www.w5dxp.com

1945. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 20:20:49 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <BKxMi.5661$6p6.1873@newssvr25.news.prodigy.net>
Source record: 35876

michel wrote:
> Should it be that simple? I understood from other posters that it will not
> work with the 1/4 wave stub..

A 1/2WL + (1/4WL series stub) is a resonant Zepp.
When the stub is shorted at the bottom and tapped
for 50 ohms, it becomes a typical J-Pole.

A 5/8WL + (1/5WL series stub) is a resonant Extended
Zepp. There is only one resonant point and it may
not be at 50 ohms but it may be close enough. You
won't know till you try it. The feedpoint impedance
can be varied by varying the spacing between the
stub elements.

A 5/8WL + (1/4WL series stub) is non-resonant.
Anywhere you tap on the stub will result in some
reactance. There's really no reason to build
this inferior design.
--
73, Cecil http://www.w5dxp.com

1946. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 20:23:15 UTC
From: Mark@k4yzRobesin.org
Message-ID: <a5a5g39hssatksbfrasn7a8agukmbba8mi@4ax.com>
Source record: 35877
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS
bears repeating

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

1947. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 20:48:16 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fduaqg$15k0$1@f04n12.cac.psu.edu>
Source record: 35878

Jimmie D wrote:
> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:v3v4g3l71fdivhs2spjogj60vr7tq4v55p@4ax.com...
>> On Tue, 02 Oct 2007 11:58:46 -0400, "Kenneth Grimm, K4XL"
>> <grimm@sbc.edu> wrote:
>>
>>> Will the eight 5 ft rods give me the same "ground" as the four 10 ft
>>> rods? Or, do I need to add even more 5 ft rods to achieve the same
>>> ground?
>> Hi Ken,
>>
>> Oddly enough, you could as easily lay the rods out in a shallow trench
>> (say, a foot deep) and get the same grounding, if not better. The
>> only rule of thumb that might be observed is to not have them in
>> proximity to one or the other. Proximity would mean about five feet
>> in 10 foot parallel trenches.
>>
>> However, to satisfy convention: cut them in half (or research the
>> archives here for rotary hammers) and keep them isolated, one from the
>> other, by at least three feet.
>>
>> 73's
>> Richard Clark, KB7QHC
>
> I think the rule of thunb is to separate ground rounds by an amount equal to
> their length.

Which gets pretty tought as you bring them to the antenna..... ;^)

-73 de Mike KB3EIA -

1948. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 20:56:37 UTC
From: Dave <noone@nowhere.com>
Message-ID: <9gyMi.4982$Jk2.3099@trndny03>
Source record: 35879

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:DvxMi.5660$6p6.381@newssvr25.news.prodigy.net...
> Jim Kelley wrote:
>>
>> Cecil Moore wrote:
>>> An *ordinary prudent man* would think that one foot
>>> of wire is a "simple series circuit" and it is in a
>>> DC circuit.
>>
>> Most ordinary prudent men that I know wouldn't characterize a one foot
>> length of wire as a series circuit.
>
> More silly word games - when it is in a DC circuit
> the current is constant. When it exists in a simple
> series GHz circuit with reflections, the current
> is not constant.
> --
> 73, Cecil http://www.w5dxp.com

you don't even need reflections. a properly terminated piece of wire has a
different current at every point along the wire.

1949. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 21:04:31 UTC
From: richardharrison@webtv.net
Message-ID: <7036-4702B25F-980@storefull-3252.bay.webtv.net>
Source record: 35880

Kenneth Grimm, K4XL wrote:
"Will the eight 5 ft rods give me the same "ground" as the four 10 ft rods?"

Maybe better.

Skin effect depends upon conductivity. On copper it is measured in thousandths of an inch but in the earth`s surface, penetration may be 10 or 20 feet.

Skin thickness is also inversely proportional to the square root of the frequency but does not change much sbove about 6 MHz due to electrical capacitance in the soil which makes it appear more of a lossy capacitance (dielectric) than a poor conductor.

Soil with a conductance of 6 mmho/meter has a dielectric thickness of about 8 feet at 6 MHz. A ground rod which would reach the depth of energy penetration is recommended. E.A. Laport says at the end of page 49 of "Radio Antenna Engineering": "Ideally, the ground rods should reach down to the depth corresponding to the skin thickness for the soil conductivity and the operating frequency."

However, using eight 5 ft rods instead of four 10 ft rods would likely improve a grounding system especially if the rods are placed some distance away from their common connection point, say 10 feet or more. The interconnection wiring acts somewhat as a radial system and will have substantial capacitive coupling to the earth at freuencies where the earth`s dielectric properties prevail.

Best regards, Richard Harrison, KB5WZI

1950. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 21:25:12 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fducvi$lc5$1@news.service.uci.edu>
Source record: 35883

Dave wrote:
> "Cecil Moore" <nospam@w5dxp.com> wrote in message
> news:DvxMi.5660$6p6.381@newssvr25.news.prodigy.net...
>
>>Jim Kelley wrote:
>>
>>>Cecil Moore wrote:
>>>
>>>>An *ordinary prudent man* would think that one foot
>>>>of wire is a "simple series circuit" and it is in a
>>>>DC circuit.
>>>
>>>Most ordinary prudent men that I know wouldn't characterize a one foot
>>>length of wire as a series circuit.
>>
>>More silly word games - when it is in a DC circuit
>>the current is constant. When it exists in a simple
>>series GHz circuit with reflections, the current
>>is not constant.
>>--
>>73, Cecil http://www.w5dxp.com
>
>
> you don't even need reflections. a properly terminated piece of wire has a
> different current at every point along the wire.

At any given instant. :-)

ac6xg

1951. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 21:25:20 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <4HyMi.25$y21.24@newssvr19.news.prodigy.net>
Source record: 35881

Dave wrote:
> you don't even need reflections. a properly terminated piece of wire has a
> different current at every point along the wire.

That's true but the attenuation factor in one foot
of wire might be hard to measure. Introduce reflections
and even a lossless wire will vary the current from
max to min every few inches at GHz frequencies.
--
73, Cecil http://www.w5dxp.com

1952. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 21:29:27 UTC
From: Dave <noone@nowhere.com>
Message-ID: <XKyMi.4106$PV1.1952@trndny08>
Source record: 35882

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:4HyMi.25$y21.24@newssvr19.news.prodigy.net...
> Dave wrote:
>> you don't even need reflections. a properly terminated piece of wire has
>> a different current at every point along the wire.
>
> That's true but the attenuation factor in one foot
> of wire might be hard to measure. Introduce reflections
> and even a lossless wire will vary the current from
> max to min every few inches at GHz frequencies.
> --
> 73, Cecil http://www.w5dxp.com

you don't need any loss either. a properly matched lossless line will have
different current at each point along the line.

1953. Re: RF Calculator

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 21:37:40 UTC
From: Dave <db5151@hotmail.com>
Message-ID: <13g5eh9kmars968@corp.supernews.com>
Source record: 35884

"The Shadow" <Repose@Zilch.com> wrote in message
news:tYvMi.198200$zz2.22289@newsfe12.phx...
> Just found this
> http://www.bird-technologies.com/techapps/tools/rfcalc_3-6-06.xls
>
> Lamont
>

Tell us a little about what it is, and I may run it. I don't download/run files about which I know nothing, and "RF Calculator" doesn't say very much...

Dave

1954. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 21:41:30 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99BE4E32E6F6Bnonenowhere@61.9.191.5>
Source record: 35885

"Kenneth Grimm, K4XL" <grimm@sbc.edu> wrote in
news:q0n4g3lf1b1kg51mquhq63jqddljum9fam@4ax.com:

> I'm installing a new tower and bought, as part of the package, the
> grounding kit. This consists of four 10 ft copper clad ground rods,
> plus all the accessories needed to connect them to the tower.
>
> My problem is that after about 5 feet of good old red clay I hit solid
> rock. I'm tempted to cut the 10 ft rods in half and simply have eight
> 5 ft rods. Since this is the only practical alternative that I can
> see.
>
> Will the eight 5 ft rods give me the same "ground" as the four 10 ft
> rods? Or, do I need to add even more 5 ft rods to achieve the same
> ground? (I knew I should have bought that Megger at the hamfest.)

Ken,

Some thoughts...

The main reason for using driven electrodes at the tower base is for lightning protection. I assume that is your purpose.

To predict the effect of driving a number of electrodes, and the depth of driving, you have to consider the effect of the soil. It has high resistivity, and resistivity often changes with depth. Clay soils are likely to be drier at the surface, and higher in resistivity.

So, longer electrodes are often more effective because they reach down to wetter layers, and it is not unusual that an 8' electrode has a quarter the resistance of a 4' electrode for that reason.

Hitting rock isn't necessarily all bad, it sometimes happens that the rock causes wetter clay above it, and shorter electrodes may be quite effective.

You can assess the likely outcome by driving two separated electrodes and measuring the resistance. You can estimate the benefit of driving further adequately spaced electrodes (assuming uniform soil).

Dont overlook using the reinforced concrete base of the antenna as part of your ground system.

A megger! No, if your earth system is any good, a megger isn't going to be useful. There are a number of techniques for measuring the effective low frequency resistance of an earth electrode or earth system. Google for things like the "three wire fall of potential method".

If you can't get sufficiently good earth from driving the electrodes as is, choices include drilling (more effective in soft porous wet rock) or strip electrodes laid in trenches.

As for the 30deg sledge hammer, I put some notes and a pic together on tools for driving earth electrodes, see http://www.vk1od.net/post/driver.htm . The smallest tool was fabricated after recent discussion on using an SDS Rotary Hammer to drive earth electrodes.

Owen

1955. Re: RF Calculator

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 21:50:36 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <44zMi.148174$dI1.101826@newsfe08.phx>
Source record: 35887

"Dave" <db5151@hotmail.com> wrote in message
news:13g5eh9kmars968@corp.supernews.com...
>
> "The Shadow" <Repose@Zilch.com> wrote in message
> news:tYvMi.198200$zz2.22289@newsfe12.phx...
>> Just found this
>> http://www.bird-technologies.com/techapps/tools/rfcalc_3-6-06.xls
>>
>> Lamont
>>
>
> Tell us a little about what it is, and I may run it. I don't download/run
> files about which I know nothing, and "RF Calculator" doesn't say very
> much...
>
> Dave
>
>

Sorry should have included a description

RF Calculator --From Bird Electronic Corp -- Includes Power, VSWR & Return
Loss, Frequency & Wavelength, Attenuation, Directivity, Cable Loss, Masking
Effect, Field Strength, Free Space Loss and Metric Conversions

Lamont

1956. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 21:50:49 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Z2zMi.56850$YL5.37251@newssvr29.news.prodigy.net>
Source record: 35886

Dave wrote:
> you don't need any loss either. a properly matched lossless line will have
> different current at each point along the line.

Different RMS current?
--
73, Cecil http://www.w5dxp.com

1957. Re: what homebrew HF antenna produces the most groundwave?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 21:58:44 UTC
From: richardharrison@webtv.net
Message-ID: <15416-4702BF14-959@storefull-3253.bay.webtv.net>
Source record: 35889

Eichard Fry wrote:
"...and subparts (c) and (e) of that figure clearly show the high-angle sidelobe cebtered at about 58 degrees elevation from an 0,64-lambda monopole that may cause self interference..per Roy Lewallen`s post earlier in this thread."

All too true. In AM broadcasting, at night the sky wave may interfere with the ground wave beyond the skip zone.

In HF transmissions, the ground wave is likely exhausted in short order so that the sky wave is the only signal available at considerable distances. There will be no ground wave to beat with the sky wave to cause fading but there are numerous paths for the sky wave which produce plenty of fading without adding any ground wave to the mix.

Best regards, Richard Harrison, KB5WZI

1958. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 22:03:28 UTC
From: Dave <noone@nowhere.com>
Message-ID: <QezMi.13085$bV2.102@trndny02>
Source record: 35888

"Jim Kelley" <jwkelley@uci.edu> wrote in message
news:fducvi$lc5$1@news.service.uci.edu...
>
>
> Dave wrote:
>> "Cecil Moore" <nospam@w5dxp.com> wrote in message
>> news:DvxMi.5660$6p6.381@newssvr25.news.prodigy.net...
>>
>>>Jim Kelley wrote:
>>>
>>>>Cecil Moore wrote:
>>>>
>>>>>An *ordinary prudent man* would think that one foot
>>>>>of wire is a "simple series circuit" and it is in a
>>>>>DC circuit.
>>>>
>>>>Most ordinary prudent men that I know wouldn't characterize a one foot
>>>>length of wire as a series circuit.
>>>
>>>More silly word games - when it is in a DC circuit
>>>the current is constant. When it exists in a simple
>>>series GHz circuit with reflections, the current
>>>is not constant.
>>>--
>>>73, Cecil http://www.w5dxp.com
>>
>>
>> you don't even need reflections. a properly terminated piece of wire has
>> a different current at every point along the wire.
>
> At any given instant. :-)
>
> ac6xg

TADA! And Jim gets the cigar!

Cecil, you take too narrow a view. at any given instant in time if you measure the current along a properly matched wire you will measure a different current and voltage all along the wire (repeating every wavelength minus losses of course). nothing was stated that required rms, other average, peak, or phasor representation.

1959. Re: I have never heard of installing a tower this way...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 22:06:20 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13g5g6q4uu9ru51@corp.supernews.com>
Source record: 35641

>
> I would never do this intentionally but I know of a tower that had its
> nuts removed(vandalism) and it stayed up for years like that unti it was
> finally demolished. The first requirment on the demolistion procedure was
> to replace the nuts. I wonder why because that used small explosive
> charges to shear the guy wires on two sides. I t would have made you cry
> to see all that tower warped after it fell.
>

If a tower that has a fixed base falls, most of it will be near the base of the tower. If the base is loose and can move, the tower may stay mostly intact and fall and cover a greater distance.

1960. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 22:34:36 UTC
From: Nate Bargmann <n0nb.DO.NOT.SPAM@ME.networksplus.net>
Message-ID: <pan.2007.10.02.22.34.40@ME.networksplus.net>
Source record: 35642

On Tue, 02 Oct 2007 14:54:03 -0400, Jimmie D wrote:

> "Richard Clark" <kb7qhc@comcast.net> wrote in message
> news:v3v4g3l71fdivhs2spjogj60vr7tq4v55p@4ax.com...
>> On Tue, 02 Oct 2007 11:58:46 -0400, "Kenneth Grimm, K4XL"
>> <grimm@sbc.edu> wrote:
>>
>>>Will the eight 5 ft rods give me the same "ground" as the four 10 ft
>>>rods? Or, do I need to add even more 5 ft rods to achieve the same
>>>ground?
>>
>> Hi Ken,
>>
>> Oddly enough, you could as easily lay the rods out in a shallow trench
>> (say, a foot deep) and get the same grounding, if not better. The only
>> rule of thumb that might be observed is to not have them in proximity
>> to one or the other. Proximity would mean about five feet in 10 foot
>> parallel trenches.
>>
>> However, to satisfy convention: cut them in half (or research the
>> archives here for rotary hammers) and keep them isolated, one from the
>> other, by at least three feet.
>>
>> 73's
>> Richard Clark, KB7QHC
>
> I think the rule of thunb is to separate ground rounds by an amount
> equal to their length.

Going by what I read on the Polyphaser site some time back and what BICSI recommends for telecom grounding, a minimum distance is eight feet between ground rods. Closer than that and the rods won't be able to dissipate the energy effectively.

Also, more shorter rods covering a larger surface area of earth is preferable to fewer deeper rods. Minimum length is considered to be 5 feet.

Finally, be sure to tie the tower, shack, and AC entrance grounds together for a "single point" ground to avoid ground potential differences between interconnected equipment.

73, de Nate >>

--

"The optimist proclaims that we live in the best of all possible worlds,
the pessimist fears this is true."

1961. Re: RF Calculator

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 22:36:09 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <Dg2AVgrZfsAHFwFj@g3ohx.demon.co.uk>
Source record: 35643

In message <44zMi.148174$dI1.101826@newsfe08.phx>, The Shadow
<Cranston@CobaltClub.com> writes
>
>"Dave" <db5151@hotmail.com> wrote in message
>news:13g5eh9kmars968@corp.supernews.com...
>>
>> "The Shadow" <Repose@Zilch.com> wrote in message
>>news:tYvMi.198200$zz2.22289@newsfe12.phx...
>>> Just found this
>>> http://www.bird-technologies.com/techapps/tools/rfcalc_3-6-06.xls
>>>
>>> Lamont
>>>
>>
>> Tell us a little about what it is, and I may run it. I don't
>>download/run files about which I know nothing, and "RF Calculator"
>>doesn't say very much...
>>
>> Dave
>>
>>
>
>Sorry should have included a description
>
>RF Calculator --From Bird Electronic Corp -- Includes Power, VSWR &
>Return Loss, Frequency & Wavelength, Attenuation, Directivity, Cable
>Loss, Masking Effect, Field Strength, Free Space Loss and Metric
>Conversions

My machine won't let me access this file.
"Norton Internet Worm Protection has detected an intrusion attempt".
--
Ian

1962. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 23:51:20 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <r9m5g35cbklvo4f5qm6dqc1vakm0bshlhg@4ax.com>
Source record: 35644

On Tue, 2 Oct 2007 14:54:03 -0400, "Jimmie D"
<GFENDER@carolina.rr.com> wrote:

>I think the rule of thunb is to separate ground rounds by an amount equal to
>their length.

Hi Jimmie,

Quite so.

73's
Richard Clark, KB7QHC

1963. Re: RF Calculator

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-02 23:51:40 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <_TAMi.148243$dI1.105614@newsfe08.phx>
Source record: 35645

"Ian Jackson" <IanJacksonRemoveThisBit@g3ohx.demon.co.uk> wrote in message
news:Dg2AVgrZfsAHFwFj@g3ohx.demon.co.uk...
> In message <44zMi.148174$dI1.101826@newsfe08.phx>, The Shadow
> <Cranston@CobaltClub.com> writes
>>
>>"Dave" <db5151@hotmail.com> wrote in message
>>news:13g5eh9kmars968@corp.supernews.com...
>>>
>>> "The Shadow" <Repose@Zilch.com> wrote in message
>>> news:tYvMi.198200$zz2.22289@newsfe12.phx...
>>>> Just found this
>>>> http://www.bird-technologies.com/techapps/tools/rfcalc_3-6-06.xls
>>>>
>>>> Lamont
>>>>
>>>
>>> Tell us a little about what it is, and I may run it. I don't
>>> download/run files about which I know nothing, and "RF Calculator"
>>> doesn't say very much...
>>>
>>> Dave
>>>
>>>
>>
>>Sorry should have included a description
>>
>>RF Calculator --From Bird Electronic Corp -- Includes Power, VSWR & Return
>>Loss, Frequency & Wavelength, Attenuation, Directivity, Cable Loss,
>>Masking Effect, Field Strength, Free Space Loss and Metric Conversions
>
> My machine won't let me access this file.
> "Norton Internet Worm Protection has detected an intrusion attempt".
> --
> Ian

Hmm can't imagine. It works fine here -- I use CA Anti-Virus.
Norton slowed my computer to a crawl and gave goofy messages like yours, so
I quit Norton several years ago.

A friend who works in aerospace suggested this site as he has used it often
for his work.

Lamont

1964. Re: RF Calculator

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-03 01:13:31 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <amq5g3lgklgbreacmvhev53c18a4phqqv2@4ax.com>
Source record: 35646

On Tue, 2 Oct 2007 16:51:40 -0700, "The Shadow"
<Cranston@CobaltClub.com> wrote:

>> My machine won't let me access this file.
>> "Norton Internet Worm Protection has detected an intrusion attempt".
>> --
>> Ian
>
>Hmm can't imagine. It works fine here -- I use CA Anti-Virus.

Hi All,

I ran ClamWin against it, says its fine when compared with 157642
known virii. Anyone with a report to the contrary, and a name to go
with the infection can chime in anytime (who knows when the next Ebola
will arrive, Norton will certainly be able to perform an autopsy after
the fact).

>Norton slowed my computer to a crawl and gave goofy messages like yours, so
>I quit Norton several years ago.

Amen. ClamWin can be configured to check incoming email, but
otherwise is passive until you tell it what to check - a file, a
folder, a disk - for free. It even updates itself - quickly.

73's
Richard Clark, KB7QHC

1965. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-03 03:09:59 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <aKDMi.60$R95.35@nlpi070.nbdc.sbc.com>
Source record: 35647

Dave wrote:
> nothing was stated that required rms, other
> average, peak, or phasor representation.

Nothing was stated that required the signal
source to be turned on either.
--
73, Cecil http://www.w5dxp.com

1966. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-03 05:39:57 UTC
From: richardharrison@webtv.net
Message-ID: <16641-47032B2D-954@storefull-3254.bay.webtv.net>
Source record: 35648

Dave wrote:
"You don`t even need reflections. A properly terminated piece of wire
has a different current at every point along the wire."

Instantaneous values, of course. But, proper termination means no
reflection. The only source of variation along a line other than
attenuation is reflection. In a uniform line, attenuation causes a
steady decline of energy as energy travels. With a lossless line,
properly terminated, variation of rnergy along a line is only the phase
produced instantaneois values along the line. These are resolved during
the period of a cycle by the root mean square calculation.

Best regards, Richard Harrison, KB5WZI

1967. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-03 06:35:43 UTC
From: michel
Message-ID: <47033868$0$237$e4fe514c@news.xs4all.nl>
Source record: 35649

"Cecil Moore" <nospam@w5dxp.com> schreef in bericht
news:BKxMi.5661$6p6.1873@newssvr25.news.prodigy.net...
> michel wrote:
>> Should it be that simple? I understood from other posters that it will
>> not work with the 1/4 wave stub..
>
> A 1/2WL + (1/4WL series stub) is a resonant Zepp.
> When the stub is shorted at the bottom and tapped
> for 50 ohms, it becomes a typical J-Pole.
>
> A 5/8WL + (1/5WL series stub) is a resonant Extended
> Zepp. There is only one resonant point and it may
> not be at 50 ohms but it may be close enough. You
> won't know till you try it. The feedpoint impedance
> can be varied by varying the spacing between the
> stub elements.
>
> A 5/8WL + (1/4WL series stub) is non-resonant.
> Anywhere you tap on the stub will result in some
> reactance. There's really no reason to build
> this inferior design.
> --

Cecil,

That is some clear information!! The 5/8 wave version needs a shorted stub
as well?

1968. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-03 07:41:02 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <47034798$0$16497$4c368faf@roadrunner.com>
Source record: 35650

hink the rule of thunb is to separate ground rounds by an amount
>> equal to their length.
>
> Going by what I read on the Polyphaser site some time back and what BICSI
> recommends for telecom grounding, a minimum distance is eight feet
> between ground rods. Closer than that and the rods won't be able to
> dissipate the energy effectively.
>
> Also, more shorter rods covering a larger surface area of earth is
> preferable to fewer deeper rods. Minimum length is considered to be 5
> feet.
>
> Finally, be sure to tie the tower, shack, and AC entrance grounds
> together for a "single point" ground to avoid ground potential
> differences between interconnected equipment.
>
> 73, de Nate >>

Not so sure about the tower, I woud bow to Polyphaser's advice but I think
that is suppose to be treated as a lightning ground and have it own ground.
Local codes would also prevail.

Jimmie

1969. Re: Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-03 08:36:37 UTC
From: oeguet@gmx.de
Message-ID: <1191400597.882778.206820@y42g2000hsy.googlegroups.com>
Source record: 35651

IT IS INCREDIBLE!
My beta NEC-Booster is WORKING now!

I implemented the Frequency Sweep (FR-Cards > 1) optimization. For more then one Frequency, the multi-processor / multi-core enhancement of my PC is fully occupied. On my dual-core Pentium, the calculation time decreases almost to half of normal NEC2 calculation time.

I will do now the Radiation Pattern optimization. Especially, if somebody only have one Frequency defined. This part is a non-trivial part and takes some more implementation time.

I need some people as a beta-tester. So I can fix all bugs and special cases.
I will let you know, when I am finished.
Aziz

1970. Re: Antenna optimizer based on NEC2/NEC4

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-03 08:43:59 UTC
From: 4nec2 <4nec2@gmx.net>
Message-ID: <1191401039.409544.145350@19g2000hsx.googlegroups.com>
Source record: 35652

oeg...@gmx.de wrote:

> I would like to try some another antenna optimizing tool. Are there
> any other antenna optimizing tools based on NEC2/NEC4?

SuperNec at http://www.supernec.com/

Arie.

1971. Launch of LPO Watch - New Edition

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-03 09:15:19 UTC
From: KPOC <marketingkpo@gmail.com>
Message-ID: <1191402919.611857.65360@50g2000hsm.googlegroups.com>
Source record: 35653

Hello !!

With the feedback, we keep receiving from the industry people; we try to improve our working on LPO Watch. This time; we have a special focus on "opportunities for small LPO houses" in the industry.

IN THIS EDITION:

· Latest Happenings in LPO Space.
· Special Article - Why Outsourcing to India Spells Good Business- T Rajashekar, Director, Acumen LPO
· Cover Story (Exclusive Interview) - Sculpting Success - David Perla & Sanjay Kamlani, Co-CEOs, Pangea3
· An Article - Setting Up Small LPO House - KPO CONSULTANTS
· Interview - The Future is Here - Vishal Aggarwal, Country Manager, LawScribe
· An Article - Perception Vs Reality - Vishal Aggarwal
· Rising Talent - Interview - Ashish Patra, Evalueserve
· An Article - Peaks & Valleys of LPO Space - Shekhar, HTMT

Kindly visit the link - http://kpoconsultants.com/lpowatch.htm and download the entire online magazine.

US EMBASSY in collaboration with KPO CONSULTANTS is organizing IPR Conference 2007 on 27th October, 07 in Chandigarh, Punjab. Get more information from the same website.

We understand your business and we are determined to nurture the LPO segment by helping you in networking, marketing, brand development, recruiting talent and in other most relevant areas related to development of your LPO.

Do give your feedback at info@kpoconsultants.com.

With warm regards,

Team
KPO CONSULTANTS

P.S. - If you don't want to receive emails from KPO CONSULTANTS, kindly reply by putting "UNSUBSCRIBE" in the subject-box. If you receive the same email more than one time, in the same inbox, reply by putting "DUPLICATE" as the subject.

1972. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-03 13:07:19 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <auMMi.2063$oA2.1715@nlpi068.nbdc.sbc.com>
Source record: 35654

michel wrote:
> That is some clear information!! The 5/8 wave version needs a shorted stub
> as well?

What we are looking for is the length of a series
matching stub section that will bring the system
to resonance, i.e. we are looking for the current
maximum point.

The graph at http://www.w5dxp.com/majic.gif
gives the length of the series matching stub
section for dipoles of various lengths from
1/2WL to 1.5WL. The graph can be used for
monopoles by doubling the monopole length.

For instance, doubling the 5/8WL monopole length
gives a 10/8WL dipole length which is 1.25WL.
A 1.25WL dipole needs a series matching stub section
of 0.19WL, i.e. the bottom stub on a 5/8WL J-Pole
needs to be 0.19WL. Make it a little too long and
trim for resonance.

If you double the 1/2WL monopole length of the
J-Pole you get a 1.0WL dipole. From the graph,
a 1.0WL dipole needs a 0.25WL series matching
stub section, i.e. the bottom stub on a 1/2WL
J-Pole needs to be 0.25WL. Of course, that is
the standard J-Pole design.

If you happened to want to design a 0.35WL J-Pole,
the series matching stub would need to be 0.33WL
long. 2(0.35WL) = 0.7WL

Let me know if you understand the graph.
--
73, Cecil http://www.w5dxp.com

1973. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-03 13:56:18 UTC
From: Alan WA4SCA <ALANBIDDLE70@YAHOO.COM>
Message-ID: <6g77g3tkf2btmikb0u37t60r1mu669ackc@4ax.com>
Source record: 35655

Ken,

The reason ground rods are 8' long has to do with electrical codes,
which are strictly for AC power safety. The rest of the advice you
have gotten will get you a good rf ground, which is what matters.

--
Alan
WA4SCA

1974. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-03 14:59:56 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <L7OMi.113$R95.47@nlpi070.nbdc.sbc.com>
Source record: 35656

michel wrote:
> That is some clear information!! The 5/8 wave version needs a shorted stub
> as well?

After my first cup of coffee, I canceled my previous
posting. The matching method I described works well
for balanced dipoles but is probably not applicable
to monopoles with no ground plane because the current
in the other leg of the series matching section has
no place to flow in a J-Pole configuration. So a 0.2WL
matching stub is not a good feed design for a 5/8WL
monopole and will generate common-mode problems unless
there is a ground plane into which the current can flow.
Best to stick with the standard 1/2WL J-Pole design. I
apologize for my fuzzy thinking - it made sense until
I woke up. And it would work for a 5/8WL monopole if
it already had ground plane radials.
--
73, Cecil http://www.w5dxp.com

1975. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-03 19:38:03 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1191440283.734301.238650@g4g2000hsf.googlegroups.com>
Source record: 35657

On Oct 2, 12:23 pm, Jim Kelley <jwkel...@uci.edu> wrote:
> michel wrote:
> >>I don't know what construction technique you have in mind, but I prefer to
> >>build them from 1/2" copper pipe. If that's what you intend to do, then
> >>just cut the vertical radiator 5/8ths instead of 1/2 lambda. Build the
> >>rest the same (1/4 wave stub). Attach your coax to the stub section using
> >>hose clamps, and tune by sliding the clamps up or down until you achieve
> >>best SWR. Works great.
>
> >>ac6xg
>
> > Should it be that simple?
>
> It can be.
>
> > I understood from other posters that it will not
> > work with the 1/4 wave stub..
>
> For some posters, a view of the forest is obscured by trees. A j-pole
> is a quarter wave stub with a 1/2 wave (or longer) radiator attached
> to one side of the open end. The feed is connected nearer to the
> shorted end of the stub. Build it and they (the QSOs) will come. Get
> it up as high above the roof as you can.
>
> ac6xg

I suppose that since there will be an antenna current on the stub, and the 5/8 section would show a reactive feedpoint if fed against a ground plane, things are a bit more complicated than just a resistive matching section (the 1/4 wave stub). I would expect that (1) the antenna won't behave quite like a 5/8 wave fed against ground, nor like a 5/4 wave center fed doublet, and (2) the stub will have to be adjusted in length as well as in transformation ratio to get a "perfect" match. In addition, if the feedline is not decoupled from the antenna, the antenna current on the feedline will change both the pattern and the feedpoint impedance (match) from what it would be if the stub+radiator were in freespace.

I'd do some NEC simulating to get an idea of a starting point AND an idea if the pattern was really an improvement over the normal half-wave over a quarter-wave stub, before trying to build one; and I'd put some effort into decoupling the antenna from other nearby metal (including the feedline)--or at least include other elements in the simulation. Even with simulating, I'd expect to have to do some fine tuning (of stub spacing or stub tap point, and possibly of stub

length) _if_ I really cared about a good match.

(Even a half-wave over a nominally quarter-wave stub can benefit from tuning the stub length to get rid of reactance, if you really care about a good match [though that in itself is somewhat over-rated]. With the stub attached, it's not a simple half-wave radiator. There will be antenna current on the stub.)

Cheers,
Tom

1976. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-03 21:20:46 UTC
From: merlin-7 <merlin-7@sc.rr.com>
Message-ID: <47040836$0$18918$4c368faf@roadrunner.com>
Source record: 35658

<snip>
> The reason ground rods are 8' long has to do with electrical codes,
> which are strictly for AC power safety. The rest of the advice you
> have gotten will get you a good rf ground, which is what matters.
>
>
> --
> Alan
> WA4SCA

I bet that code saying you need a 8 foot ground rod for AC, has little to do with its ability to ground an AC current and more to do with it being a common length.
Most every building material is 8 foot long...

1977. Re: RF Calculator

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-03 22:25:52 UTC
From: Ian Jackson <IanJacksonRemoveThisBit@g3ohx.demon.co.uk>
Message-ID: <eXt3oGCwbBBHFwdx@g3ohx.demon.co.uk>
Source record: 35660

In message <amq5g3lgklgbreacmvhev53c18a4phqqv2@4ax.com>, Richard Clark
<kb7qhc@comcast.net> writes
>On Tue, 2 Oct 2007 16:51:40 -0700, "The Shadow"
><Cranston@CobaltClub.com> wrote:
>
>>> My machine won't let me access this file.
>>> "Norton Internet Worm Protection has detected an intrusion attempt".
>>> --
>>> Ian
>>
>>Hmm can't imagine. It works fine here -- I use CA Anti-Virus.
>
>Hi All,
>
>I ran ClamWin against it, says its fine when compared with 157642
>known virii. Anyone with a report to the contrary, and a name to go
>with the infection can chime in anytime (who knows when the next Ebola
>will arrive, Norton will certainly be able to perform an autopsy after
>the fact).
>
>>Norton slowed my computer to a crawl and gave goofy messages like yours, so
>>I quit Norton several years ago.
>
>Amen. ClamWin can be configured to check incoming email, but
>otherwise is passive until you tell it what to check - a file, a
>folder, a disk - for free. It even updates itself - quickly.
>
>73's
>Richard Clark, KB7QHC

All comments noted. I'll investigate why NAV is rejecting this file.
--
Ian

1978. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-03 22:27:56 UTC
From: Dave <noone@nowhere.com>
Message-ID: <MHUMi.2219$R%1.1128@trndny06>
Source record: 35659

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:16641-47032B2D-954@storefull-3254.bay.webtv.net...
> Dave wrote:
> "You don`t even need reflections. A properly terminated piece of wire
> has a different current at every point along the wire."
>
> Instantaneous values, of course. But, proper termination means no
> reflection. The only source of variation along a line other than
> attenuation is reflection. In a uniform line, attenuation causes a
> steady decline of energy as energy travels. With a lossless line,
> properly terminated, variation of rnergy along a line is only the phase
> produced instantaneois values along the line. These are resolved during
> the period of a cycle by the root mean square calculation.
>
> Best regards, Richard Harrison, KB5WZI
>

and what is wrong with instantaneous values? lacking a requirement to talk
in peak, phasor, rms, or some other averaging method it is perfectly valid
to assume instantaneous measurements. and if I remember right we were
talking of measuring current, not energy. and time is a valid parameter
when measuring current, just hook up your o-scope and measure away...
measure that current on each end of a wire, or coil, or coax, with a dual
trace scope and see the difference! throw away that silly-wire-reader thing
and get back to the basics. get a pulse generator and build yourself a
reflectometer and make use of those reflections!

1979. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-03 23:26:59 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <47042536$0$28843$4c368faf@roadrunner.com>
Source record: 35661

"Owen Duffy" <none@no.where> wrote in message
news:Xns99BE4E32E6F6Bnonenowhere@61.9.191.5...
> "Kenneth Grimm, K4XL" <grimm@sbc.edu> wrote in
> news:q0n4g3lf1b1kg51mquhq63jqddljum9fam@4ax.com:
>
>> I'm installing a new tower and bought, as part of the package, the
>> grounding kit. This consists of four 10 ft copper clad ground rods,
>> plus all the accessories needed to connect them to the tower.
>>
>> My problem is that after about 5 feet of good old red clay I hit solid
>> rock. I'm tempted to cut the 10 ft rods in half and simply have eight
>> 5 ft rods. Since this is the only practical alternative that I can
>> see.
>>
>> Will the eight 5 ft rods give me the same "ground" as the four 10 ft
>> rods? Or, do I need to add even more 5 ft rods to achieve the same
>> ground? (I knew I should have bought that Megger at the hamfest.)
>
> Ken,
>
> Some thoughts...
>
> The main reason for using driven electrodes at the tower base is for
> lightning protection. I assume that is your purpose.
>
> To predict the effect of driving a number of electrodes, and the depth of
> driving, you have to consider the effect of the soil. It has high
> resistivity, and resistivity often changes with depth. Clay soils are
> likely to be drier at the surface, and higher in resistivity.
>
> So, longer electrodes are often more effective because they reach down to
> wetter layers, and it is not unusual that an 8' electrode has a quarter
> the resistance of a 4' electrode for that reason.
>
> Hitting rock isn't necessarily all bad, it sometimes happens that the
> rock causes wetter clay above it, and shorter electrodes may be quite
> effective.
>
> You can assess the likely outcome by driving two separated electrodes and
> measuring the resistance. You can estimate the benefit of driving further
> adequately spaced electrodes (assuming uniform soil).
>
> Dont overlook using the reinforced concrete base of the antenna as part
> of your ground system.

>
> A megger! No, if your earth system is any good, a megger isn't going to
> be useful. There are a number of techniques for measuring the effective
> low frequency resistance of an earth electrode or earth system. Google
> for things like the "three wire fall of potential method".
>
> If you can't get sufficiently good earth from driving the electrodes as
> is, choices include drilling (more effective in soft porous wet rock) or
> strip electrodes laid in trenches.
>
> As for the 30deg sledge hammer, I put some notes and a pic together on
> tools for driving earth electrodes, see
> http://www.vk1od.net/post/driver.htm . The smallest tool was fabricated
> after recent discussion on using an SDS Rotary Hammer to drive earth
> electrodes.
>
> Owen

One way to determine the low frequency effectiveness of a ground is to connect the hot side of the power mains to the ground through a fuse and see how big of a fuse you can blow. There are special devices built for doing this but it can easily and safely be done with less than professional equipment. Just get all the pets and kids out of the way first.

Jimmie

1980. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-04 03:05:51 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <iMYMi.129$LD2.10@newssvr17.news.prodigy.net>
Source record: 35662

Dave wrote:
> and what is wrong with instantaneous values?

Nothing if presented as part of the context,
confusing if not since most people would
assume the context is RMS. Do I have 110v
AC in my house? You can argue that the answer
is "no" but you would need to state the context.
--
73, Cecil http://www.w5dxp.com

1981. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-04 06:25:56 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <WH%Mi.7926$7s6.2992@newsfe16.phx>
Source record: 35663

"Jimmie D" <GFENDER@carolina.rr.com> wrote in message
news:47042536$0$28843$4c368faf@roadrunner.com...

>
> One way to determine the low frequency effectiveness of a ground is to
> connect the hot side of the power mains to the ground through a fuse and
see
> how big of a fuse you can blow. There are special devices built for doing
> this but it can easily and safely be done with less than professional
> equipment. Just get all the pets and kids out of the way first.

Well, yeah! :-)

But there is a standard test for ground conductivity. Some pros told me how
they do it.

Drive three ground rods, A, B and C along a line. Pass a known current
between A and C. Measure the voltage drop between A and B. Ohm's Law will
give you the resistance at that place. I don't personally know what a
"good" number is for that test -- however,
http://mrtmag.com/techspeak/radio_wellgrounded_principles/ suggests 10 ohms.
These guys http://www.rainmaster.com/pdf/TB025C.pdf say the NEC wants no
more than 25 ohms.

I suppose if the soil conductivity is poor, multiple interconnected rods are
advisable/required.

1982. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-04 07:32:18 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99BFB25D09B01nonenowhere@61.9.191.5>
Source record: 35664

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in
news:WH%Mi.7926$7s6.2992@newsfe16.phx:

>
> "Jimmie D" <GFENDER@carolina.rr.com> wrote in message
> news:47042536$0$28843$4c368faf@roadrunner.com...
>
>
>>
>> One way to determine the low frequency effectiveness of a ground is
>> to connect the hot side of the power mains to the ground through a
>> fuse and
> see
>> how big of a fuse you can blow. There are special devices built for
>> doing this but it can easily and safely be done with less than
>> professional equipment. Just get all the pets and kids out of the way
>> first.
>
> Well, yeah! :-)

Well, dangerous and imprecise.

>
> But there is a standard test for ground conductivity. Some pros told
> me how they do it.
>
> Drive three ground rods, A, B and C along a line. Pass a known
> current between A and C. Measure the voltage drop between A and B.
> Ohm's Law will give you the resistance at that place. I don't

You are measuring the resistance of the A electrode in this case. A could be a ground system (ie more than one electrode).

There are some rules to follow wrt spacing of B and C from A. Worth a read of how it is done before making dodgy measurements.

Commercial instruments using this principle may use an internal AC generator somewhere around 1kHz with a synchronous detector, and chosen to be in between the harmonics of 50Hz and 60Hz, so they can make measurements that are less disturbed than measurements that are susceptible to 50Hz or 60Hz ground currents from other things. Yes, you can make measurements of a ground electrode connected to an working AC installation... so long as the electrode voltage due to the 50Hz or 60Hz current is too great.

> personally know what a "good" number is for that test -- however,
> http://mrtmag.com/techspeak/radio_wellgrounded_principles/ suggests 10
> ohms. These guys http://www.rainmaster.com/pdf/TB025C.pdf say the NEC
> wants no more than 25 ohms.

In this part of the world, the relevant standard requires that the entire lightning protection earth system has a resistance of less than 10 ohms before equipotential bonding to other services.

Owen

1983. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-04 08:42:21 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <4704a760$0$24335$4c368faf@roadrunner.com>
Source record: 35665

"Owen Duffy" <none@no.where> wrote in message
news:Xns99BFB25D09B01nonenowhere@61.9.191.5...
> "Sal M. Onella" <salmonella@food.poisoning.org> wrote in
> news:WH%Mi.7926$7s6.2992@newsfe16.phx:
>
>>
>> "Jimmie D" <GFENDER@carolina.rr.com> wrote in message
>> news:47042536$0$28843$4c368faf@roadrunner.com...
>>
>>
>>>
>>> One way to determine the low frequency effectiveness of a ground is
>>> to connect the hot side of the power mains to the ground through a
>>> fuse and
>> see
>>> how big of a fuse you can blow. There are special devices built for
>>> doing this but it can easily and safely be done with less than
>>> professional equipment. Just get all the pets and kids out of the way
>>> first.
>>
>> Well, yeah! :-)
>
> Well, dangerous and imprecise.
>
>>
>> But there is a standard test for ground conductivity. Some pros told
>> me how they do it.
>>
>> Drive three ground rods, A, B and C along a line. Pass a known
>> current between A and C. Measure the voltage drop between A and B.
>> Ohm's Law will give you the resistance at that place. I don't
>
> You are measuring the resistance of the A electrode in this case. A could
> be a ground system (ie more than one electrode).
>
> There are some rules to follow wrt spacing of B and C from A. Worth a
> read of how it is done before making dodgy measurements.
>
> Commercial instruments using this principle may use an internal AC
> generator somewhere around 1kHz with a synchronous detector, and chosen
> to be in between the harmonics of 50Hz and 60Hz, so they can make
> measurements that are less disturbed than measurements that are
> susceptible to 50Hz or 60Hz ground currents from other things. Yes, you
> can make measurements of a ground electrode connected to an working AC

> installation... so long as the electrode voltage due to the 50Hz or 60Hz
> current is too great.
>
>> personally know what a "good" number is for that test -- however,
>> http://mrtmag.com/techspeak/radio_wellgrounded_principles/ suggests 10
>> ohms. These guys http://www.rainmaster.com/pdf/TB025C.pdf say the NEC
>> wants no more than 25 ohms.
>
> In this part of the world, the relevant standard requires that the entire
> lightning protection earth system has a resistance of less than 10 ohms
> before equipotential bonding to other services.
>
> Owen
>

1984. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-04 08:42:34 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <4704a76d$0$20614$4c368faf@roadrunner.com>
Source record: 35666

"Owen Duffy" <none@no.where> wrote in message
news:Xns99BFB25D09B01nonenowhere@61.9.191.5...
> "Sal M. Onella" <salmonella@food.poisoning.org> wrote in
> news:WH%Mi.7926$7s6.2992@newsfe16.phx:
>
>>
>> "Jimmie D" <GFENDER@carolina.rr.com> wrote in message
>> news:47042536$0$28843$4c368faf@roadrunner.com...
>>
>>
>>>
>>> One way to determine the low frequency effectiveness of a ground is
>>> to connect the hot side of the power mains to the ground through a
>>> fuse and
>> see
>>> how big of a fuse you can blow. There are special devices built for
>>> doing this but it can easily and safely be done with less than
>>> professional equipment. Just get all the pets and kids out of the way
>>> first.
>>
>> Well, yeah! :-)
>
> Well, dangerous and imprecise.
>
>>
>> But there is a standard test for ground conductivity. Some pros told
>> me how they do it.
>>
>> Drive three ground rods, A, B and C along a line. Pass a known
>> current between A and C. Measure the voltage drop between A and B.
>> Ohm's Law will give you the resistance at that place. I don't
>
> You are measuring the resistance of the A electrode in this case. A could
> be a ground system (ie more than one electrode).
>
> There are some rules to follow wrt spacing of B and C from A. Worth a
> read of how it is done before making dodgy measurements.
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> Commercial instruments using this principle may use an internal AC
> generator somewhere around 1kHz with a synchronous detector, and chosen
> to be in between the harmonics of 50Hz and 60Hz, so they can make
> measurements that are less disturbed than measurements that are
> susceptible to 50Hz or 60Hz ground currents from other things. Yes, you
> can make measurements of a ground electrode connected to an working AC

> installation... so long as the electrode voltage due to the 50Hz or 60Hz
> current is too great.
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>> personally know what a "good" number is for that test -- however,
>> http://mrtmag.com/techspeak/radio_wellgrounded_principles/ suggests 10
>> ohms. These guys http://www.rainmaster.com/pdf/TB025C.pdf say the NEC
>> wants no more than 25 ohms.
>
> In this part of the world, the relevant standard requires that the entire
> lightning protection earth system has a resistance of less than 10 ohms
> before equipotential bonding to other services.
>
> Owen
>

1985. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-04 08:52:24 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <4704a9bb$0$18927$4c368faf@roadrunner.com>
Source record: 35667

"Owen Duffy" <none@no.where> wrote in message
news:Xns99BFB25D09B01nonenowhere@61.9.191.5...
> "Sal M. Onella" <salmonella@food.poisoning.org> wrote in
> news:WH%Mi.7926$7s6.2992@newsfe16.phx:
>
>>
>> "Jimmie D" <GFENDER@carolina.rr.com> wrote in message
>> news:47042536$0$28843$4c368faf@roadrunner.com...
>>
>>
>>>
>>> One way to determine the low frequency effectiveness of a ground is
>>> to connect the hot side of the power mains to the ground through a
>>> fuse and
>> see
>>> how big of a fuse you can blow. There are special devices built for
>>> doing this but it can easily and safely be done with less than
>>> professional equipment. Just get all the pets and kids out of the way
>>> first.
>>
>> Well, yeah! :-)
>
> Well, dangerous and imprecise.

Not really that dangerous if you know what you are doing and as far as precesion goes all you really want is a less than some number value. In the case of the power company everything is good if you can pop a 4 amp fuse. The PoCO has a special device for doing this. It looks like a breach loading shotgun with a pistol grip. Just plug it in to an outlet, put in the fuse and touch the barrel to ground. Working on a hot chassis is probably more dangerous than this even if you had to cobble up some way of doing it .

Jimmie

1986. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-04 14:40:33 UTC
From: nm5k@wt.net
Message-ID: <1191508833.392237.81940@r29g2000hsg.googlegroups.com>
Source record: 35668

On Oct 3, 9:59 am, Cecil Moore <nos...@w5dxp.com> wrote:
So a 0.2WL
> matching stub is not a good feed design for a 5/8WL
> monopole and will generate common-mode problems unless
> there is a ground plane into which the current can flow.
> Best to stick with the standard 1/2WL J-Pole design. I
> apologize for my fuzzy thinking - it made sense until
> I woke up. And it would work for a 5/8WL monopole if
> it already had ground plane radials.
> --
> 73, Cecil http://www.w5dxp.com

It's not the matching scheme that is the real problem..
A single 5/8 radiator over no radials is going to be a real
dog no matter how you match it.
And if you do use radials and a 5/8 radiator, you might
as well feed it with a simple series loading coil.
I've never been a great fan of J-poles, but if I were to
build one, it would be the standard 1/2 wave version.
If one is going to build a copper J pole using 5/8
elements, they should use two and build it as a
collinear. And even in that case, there should be a
decoupling section added for the best performance.
My favorite "cheap and easy" antenna for VHF is
not the j pole.. It's the 1/4 wave ground plane with
sloping radials. It's easier to build, needs no matching,
and the gain should be very close to most 1/2 wave
j poles.
MK

1987. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-04 14:48:26 UTC
From: nm5k@wt.net
Message-ID: <1191509306.431990.298220@k79g2000hse.googlegroups.com>
Source record: 35669

On Oct 2, 2:06 pm, "Jimmie D" <GFEN...@carolina.rr.com> wrote:

>
> The small theroretical gain advantage that a 5/8wl radiator has over a 1/2wl
> radiator is dependent on it having a very good counterpoise. However one
> may be able to fabricate a 5/8wl antenna with a couterpoise matched to the
> feedline with a stub made of metal tubing.
>
> Jimmie
The best "counterpoise" for a 5/8 radiator is a set of 5/8 radials...
But in that case, it's more of a collinear.
Myself, I think a 5/8 radiator should always be used with a 5/8
lower section of you want the full performance. IE: dual 5/8
collinear.
Anything else is a perversion... :/
My 2nd choice would be to use 3/4 wave radials.
1/2 wave radials would be useless.
1/4 wave radials are semi useless, and give a lousy pattern..
MK

1988. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-04 16:01:29 UTC
From: michel
Message-ID: <47050e03$0$244$e4fe514c@news.xs4all.nl>
Source record: 35670

<nm5k@wt.net> schreef in bericht
news:1191509306.431990.298220@k79g2000hse.googlegroups.com...
> On Oct 2, 2:06 pm, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
>
>>
>> The small theroretical gain advantage that a 5/8wl radiator has over a
>> 1/2wl
>> radiator is dependent on it having a very good counterpoise. However one
>> may be able to fabricate a 5/8wl antenna with a couterpoise matched to
>> the
>> feedline with a stub made of metal tubing.
>>
>> Jimmie
> The best "counterpoise" for a 5/8 radiator is a set of 5/8 radials...
> But in that case, it's more of a collinear.
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> lower section of you want the full performance. IE: dual 5/8
> collinear.
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> My 2nd choice would be to use 3/4 wave radials.
> 1/2 wave radials would be useless.
> 1/4 wave radials are semi useless, and give a lousy pattern..
> MK

In my search on vertical antennas I also found a option to add on a 1/4 wave
element a 5/8 element. This needs a phasing coil?
I also found a 5/8 element mounted over a 1/4 innerelement.. ?

But wat is the best for homebrew, and a few dB gain?

1989. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-04 16:01:57 UTC
From: Gary #203 <gloco10549@aol.com>
Message-ID: <13ga3j01f812f65@corp.supernews.com>
Source record: 35671

WELL, I WOULD DO A 3/4 WAVE BY A 1/4 WAVE.

THIS WORKS REAL WELL ON 10 METERS WITH A LOT OF GAIN.

CHECK OUT MINE ON MY WEBSITE.

http://www.dxradioworld.com

1990. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-04 16:40:58 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fe352s$lf2$1@news.service.uci.edu>
Source record: 35672

K7ITM wrote:
> On Oct 2, 12:23 pm, Jim Kelley <jwkel...@uci.edu> wrote:
>
>>michel wrote:
>>
>>>>I don't know what construction technique you have in mind, but I prefer to
>>>>build them from 1/2" copper pipe. If that's what you intend to do, then
>>>>just cut the vertical radiator 5/8ths instead of 1/2 lambda. Build the
>>>>rest the same (1/4 wave stub). Attach your coax to the stub section using
>>>>hose clamps, and tune by sliding the clamps up or down until you achieve
>>>>best SWR. Works great.
>>
>>>>ac6xg
>>
>>>Should it be that simple?
>>
>>It can be.
>>
>>
>>>I understood from other posters that it will not
>>>work with the 1/4 wave stub..
>>
>>For some posters, a view of the forest is obscured by trees. A j-pole
>>is a quarter wave stub with a 1/2 wave (or longer) radiator attached
>>to one side of the open end. The feed is connected nearer to the
>>shorted end of the stub. Build it and they (the QSOs) will come. Get
>>it up as high above the roof as you can.
>>
>>ac6xg
>
>
> I suppose that since there will be an antenna current on the stub, and
> the 5/8 section would show a reactive feedpoint if fed against a
> ground plane, things are a bit more complicated than just a resistive
> matching section (the 1/4 wave stub). I would expect that (1) the
> antenna won't behave quite like a 5/8 wave fed against ground, nor
> like a 5/4 wave center fed doublet, and (2) the stub will have to be
> adjusted in length as well as in transformation ratio to get a
> "perfect" match. In addition, if the feedline is not decoupled from
> the antenna, the antenna current on the feedline will change both the
> pattern and the feedpoint impedance (match) from what it would be if
> the stub+radiator were in freespace.
>
> I'd do some NEC simulating to get an idea of a starting point AND an

> idea if the pattern was really an improvement over the normal half-
> wave over a quarter-wave stub, before trying to build one; and I'd put
> some effort into decoupling the antenna from other nearby metal
> (including the feedline)--or at least include other elements in the
> simulation. Even with simulating, I'd expect to have to do some fine
> tuning (of stub spacing or stub tap point, and possibly of stub
> length) if I really cared about a good match.
>
> Cheers,
> Tom

Hi Tom -

I've built several of them and achieved a good (<1.5:1) match in the
middle of the band.

73, ac6xg

1991. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-04 16:53:08 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fe35pmlts1@news.service.uci.edu>
Source record: 35673

K7ITM wrote:

> On Oct 2, 12:23 pm, Jim Kelley <jwkel...@uci.edu> wrote:
>
>>michel wrote:
>>
>>>>I don't know what construction technique you have in mind, but I prefer to
>>>>build them from 1/2" copper pipe. If that's what you intend to do, then
>>>>just cut the vertical radiator 5/8ths instead of 1/2 lambda. Build the
>>>>rest the same (1/4 wave stub). Attach your coax to the stub section using
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> the stub+radiator were in freespace.
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> idea if the pattern was really an improvement over the normal half-
> wave over a quarter-wave stub, before trying to build one; and I'd put
> some effort into decoupling the antenna from other nearby metal
> (including the feedline)--or at least include other elements in the
> simulation. Even with simulating, I'd expect to have to do some fine
> tuning (of stub spacing or stub tap point, and possibly of stub
> length) if I really cared about a good match.
>
> Cheers,
> Tom

I found them to work quite well, though I fine tuned them on the mast
- not in the garage next to the transmitter.

73, jk

1992. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-04 17:04:36 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1191517476.163237.247780@w3g2000hsg.googlegroups.com>
Source record: 35674

On Oct 4, 7:40 am, n...@wt.net wrote:
> On Oct 3, 9:59 am, Cecil Moore <nos...@w5dxp.com> wrote:
> So a 0.2WL
>
> > matching stub is not a good feed design for a 5/8WL
> > monopole and will generate common-mode problems unless
> > there is a ground plane into which the current can flow.
> > Best to stick with the standard 1/2WL J-Pole design. I
> > apologize for my fuzzy thinking - it made sense until
> > I woke up. And it would work for a 5/8WL monopole if
> > it already had ground plane radials.
> > --
> > 73, Cecil http://www.w5dxp.com
>
> It's not the matching scheme that is the real problem..
> A single 5/8 radiator over no radials is going to be a real
> dog no matter how you match it.
> And if you do use radials and a 5/8 radiator, you might
> as well feed it with a simple series loading coil.
> I've never been a great fan of J-poles, but if I were to
> build one, it would be the standard 1/2 wave version.
> If one is going to build a copper J pole using 5/8
> elements, they should use two and build it as a
> collinear. And even in that case, there should be a
> decoupling section added for the best performance.
> My favorite "cheap and easy" antenna for VHF is
> not the j pole.. It's the 1/4 wave ground plane with
> sloping radials. It's easier to build, needs no matching,
> and the gain should be very close to most 1/2 wave
> j poles.
> MK

Amen, bro. Another advantage of the ground plane: the radials decouple the feedline from the antenna. In a J-pole installation, either you put some effort into decoupling the feedline, or you accept that the feedline is going to radiate (and change the pattern). (I suppose yet another option is to deny the fact that feedlines can radiate...)

It's easy to build a "quick-and-dirty" 146MHz ground plane with an SO-239, some 4-40 screws, washers and nuts, and three lengths of 12 or 14 AWG copper wire. A couple half-wave lengths attach to the flange of the SO-239 with the 4-40 hardware (or just solder them) so there are 4 1/4 wave wires sticking out from the flange; a 1/4 wave piece solders into the center pin. The radials can be bent down a bit to

get a match to 50 ohms. You can put a little loop in the top of the radiator and hoist it into a tree with fishing line or the like. There are several ways you can attach it to the top of a mast; it doesn't care a lot about what you do below it.

Cheers,
Tom

1993. Re: "Quarter wave ground mounted radials are a waste of wire."

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-04 17:24:49 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fe37l3ncr1@news.service.uci.edu>
Source record: 35675

Richard Harrison wrote:

> Dave wrote:
> "You don`t even need reflections. A properly terminated piece of wire
> has a different current at every point along the wire."
>
> Instantaneous values, of course. But, proper termination means no
> reflection. The only source of variation along a line other than
> attenuation is reflection.

The only electromagnetic currents 'flowing' on a transmission line are the currents which result from the reflected and/or the forward electromagnetic waves. Neither of these currents varies periodically along the line (except as noted, instantaneously).

73, ac6xg

1994. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-04 17:36:10 UTC
From: nm5k@wt.net
Message-ID: <1191519370.143740.171080@50g2000hsm.googlegroups.com>
Source record: 35676

On Oct 4, 11:01 am, "michel" <nomail@@nomail.com> wrote:

> In my search on vertical antennas I also found a option to add on a 1/4 wave
> element a 5/8 element. This needs a phasing coil?
> I also found a 5/8 element mounted over a 1/4 innerelement.. ?
>
> But wat is the best for homebrew, and a few dB gain?

With VHF verticals, half the battle is decoupling the feedline.
It's no use worrying about extended verticals, unless you also
consider decoupling the line. Radiation from the line will skew
the pattern upwards off the horizon, and any gain from extended
radiators will be useless.
If you are going to use a 5/8 radiator, I would go whole hog and
build a copper collinear with dual 5/8 elements. I wouldn't waste time
with other versions. And even the dual 5/8 collinear needs a
decoupling section of some type.
One reason I like the 1/4 wave ground planes is that they naturally
decouple from the feedline fairly well. The more radials you use,
the better the decoupling, and if you add a 2nd set that is 1/4
below, you will have very good decoupling.
That method can be used to decouple a dual 5/8 vertical.
I would worry more about how the line will be decoupled, than
I would element length. It's more important.
MK

1995. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-04 18:06:54 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <2Z9Ni.57563$YL5.47419@newssvr29.news.prodigy.net>
Source record: 35677

Gary #203 wrote:
> WELL, I WOULD DO A 3/4 WAVE BY A 1/4 WAVE.

A 3/4WL vertical monopole has a take-off-angle of 47 degrees.
5/8WL is the length limit for good monopole DX performance.
--
73, Cecil http://www.w5dxp.com

1996. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-04 21:43:16 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <U7dNi.201710$zz2.157185@newsfe12.phx>
Source record: 35678

<nm5k@wt.net> wrote in message
news:1191508833.392237.81940@r29g2000hsg.googlegroups.com...
< snip >

> I've never been a great fan of J-poles, but if I were to
> build one, it would be the standard 1/2 wave version.
> If one is going to build a copper J pole using 5/8
> elements, they should use two and build it as a
> collinear. And even in that case, there should be a
> decoupling section added for the best performance.
> My favorite "cheap and easy" antenna for VHF is
> not the j pole.. It's the 1/4 wave ground plane with
> sloping radials.

Having made a couple of whip+radials antennas out of old coathangers, I
am not at all hostile to your views.

However, as a fan of the j-pole, myself, I offer their ruggedness as a
distinct advantage. My first copper pipe j-pole (from the early 1990's) is
still on my roof. It has turned a slightly darker color but is otherwise as
good as new. I made three for our Fire House RACES station (two 2m & a 6m)
and they will outlive me.

Just my $0.02.

73,
"Sal"
(KD6VKW)

1997. Need help: NEC output data and Average Power Gain calculation

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 02:30:36 UTC
From: oeguet@gmx.de
Message-ID: <1191551436.026911.105830@r29g2000hsg.googlegroups.com>
Source record: 35679

Hello,

my NEC2 Booster with multi-core / multi-processor support stucks at the moment. On Radiation-Pattern-Division (each core computes an interleaved part of the global RP-command), with different input file calculations, I got different Average Power Gain values for each calculation. The calculated results of each core have to be merged together.
How can I compute the exact Average Power Gain (APG), using the Radiation Pattern values listed below? Is it at all possible to compute the APG, using the Radiation Pattern data?

Or should I take the stupid average of the APGs of each core?
This question concern also to SOLID ANGLE USED IN AVERAGING(xxx) handling.

Please help me. The more you wait, the more you will wait, till I am finished!
I intend to give the NEC2 Booster for free as soon as possible.

Regard,
Aziz

```
- - - RADIATION
PATTERNS - - -

- - ANGLES - - - POWER GAINS - - - - POLARIZATION -
- - - - - E(THETA) - - - - - - E(PHI) - - -
THETA PHI VERT. HOR. TOTAL AXIAL TILT
SENSE MAGNITUDE PHASE MAGNITUDE PHASE
DEGREES DEGREES DB DB DB RATIO
DEG. VOLTS/M DEGREES VOLTS/M DEGREES
-180.00 0.00 -38.92 -30.41 -29.84 0.27061 -75.37
LEFT 8.77601E-06 -115.81 2.33983E-05 14.12
-175.00 0.00 -19.63 -29.44 -19.20 0.09314 -17.20
RIGHT 8.09291E-05 -157.05 2.61469E-05 -318.65
-170.00 0.00 -14.07 -26.90 -13.85 0.15930 -9.29
RIGHT 1.53540E-04 -147.94 3.50470E-05 -282.21
-165.00 0.00 -11.17 -23.57 -10.92 0.20695 -6.91
RIGHT 2.14393E-04 -129.80 5.13915E-05 -248.70
-160.00 0.00 -10.20 -20.95 -9.85 0.26165 -7.14
RIGHT 2.39636E-04 -103.78 6.94802E-05 -217.48
...
<cut>
```

```
AVERAGE POWER GAIN= 9.11251E-01 SOLID ANGLE USED IN
AVERAGING=( 4.0000)*PI STERADIANS.
```

1998. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 04:33:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13gbflgr7j10e5d@corp.supernews.com>
Source record: 35680

Hi Tom,

K7ITM wrote:
>
> Amen, bro. Another advantage of the ground plane: the radials
> decouple the feedline from the antenna. . .

Here's a fun experiment with EZNEC.

1. Open the VHFGP.EZ example file. Click View Ant to open the View Antenna display. In the View Antenna display control section, click Center Ant Image so you can see the antenna better.
2. Add the following wire:

End 1: 0, 0, 5 (wavelengths)
End 2: 0, 0, 4.727 (wavelengths)
Diameter: 0.25 (inches)
Segments: 6

This represents the outside of a feedline connected to the feedpoint.
3. Click the Currents button. Look at the display and, in the Currents box, compare the current on the outside of the "feedline" (Wire 6, Segment 1) to the main radiator current (Wire 5, Segment 1).
4. Change Plot Type to Elevation. Click FF Plot to see the 2D elevation pattern.
5. Reconsider the statement about decoupling. . .

This is admittedly contrived to show a particularly extreme case. But try different lengths of "feedline" either open or connected to ground and you'll find other cases where the feedline current is high and the pattern distorted. You'll also find cases where inserting a "balun" (high impedance load) in the "feedline" will actually increase the feedline current due to changing the current distribution to a value more favorable for the particular feedline length.

Roy Lewallen, W7EL

1999. Handheld Scanner Antenna Polarization Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 11:41:07 UTC
From: Robert11 <rgsros@notme.com>
Message-ID: <Y7mdnQTBz6HTv5vanZ2dnUVZ_rCtnZ2d@comcast.com>
Source record: 35681

Hello,

Will be buying one of the new GRE hand held scanners soon.
Like all handhelds, it comes with the relatively short vertical whip antenna coming out of the top; I guess they are also termed rubber-duckies.

Not all that sharp with antenna theory:

My guess is that when held vertically, it is optimum for receiving verticall Polarized signals, and my guess is, also, that all P.D.'s and Fire Dept transmitters use vertically polarized signals.
Is all this correct so far ?

a. What happens if I lay the radio, with the antenna too of course, hotizontally on its side ?
Will it still pick up "anything" ?

b. Transmissions from airplanes: is there any meaningful polarization from their antennas, or is it pretty random by the time it reaches the ground, such that any any antenna orientation would be pretty much the same ?

Thanks,
Bob

2000. Re: Handheld Scanner Antenna Polarization Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 12:30:59 UTC
From: Dave <noone@nowhere.com>
Message-ID: <78qNi.9193$Hb2.391@trndny07>
Source record: 35682

"Robert11" <rgsros@notme.com> wrote in message
news:Y7mdnQTBz6HTv5vanZ2dnUVZ_rCtnZ2d@comcast.com...
> Hello,
>
> Will be buying one of the new GRE hand held scanners soon.
> Like all handhelds, it comes with the relatively short vertical whip
> antenna coming out of the top; I guess they are also termed
> rubber-duckies.
>
> Not all that sharp with antenna theory:
>
> My guess is that when held vertically, it is optimum for receiving
> verticall Polarized signals, and my guess is, also, that all P.D.'s and
> Fire Dept transmitters use vertically polarized signals.
> Is all this correct so far ?
>
> a. What happens if I lay the radio, with the antenna too of course,
> hotizontally on its side ?
> Will it still pick up "anything" ?

yes, 'rubber ducks' are not all that directive, though they will have a null
off the top and bottom that may be pretty good.. you would likely want to
avoid laying it on its side on a conductive surface as that may affect it
more than the polarization change.

>
> b. Transmissions from airplanes: is there any meaningful polarization
> from their antennas, or is it pretty random by the time it reaches the
> ground, such that any any antenna orientation would be pretty much the
> same ?

yeah, pretty much. though for high angle paths a vertical antenna may
produce a null that reduces the signal. but on the bright side they can't
be all that far away if they are almost overhead so the signals are stronger
to start with.

>
> Thanks,
> Bob
>

2001. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 13:39:59 UTC
From: nm5k@wt.net
Message-ID: <1191591599.857226.8080@19g2000hsx.googlegroups.com>
Source record: 35683

On Oct 4, 11:33 pm, Roy Lewallen <w...@eznec.com> wrote:

> Here's a fun experiment with EZNEC.
>
> 1. Open the VHFGP.EZ example file. Click View Ant to open the View
> Antenna display. In the View Antenna display control section, click
> Center Ant Image so you can see the antenna better.
> 2. Add the following wire:
>
> End 1: 0, 0, 5 (wavelengths)
> End 2: 0, 0, 4.727 (wavelengths)
> Diameter: 0.25 (inches)
> Segments: 6
>
> This represents the outside of a feedline connected to the feedpoint.
> 3. Click the Currents button. Look at the display and, in the Currents
> box, compare the current on the outside of the "feedline" (Wire 6,
> Segment 1) to the main radiator current (Wire 5, Segment 1).
> 4. Change Plot Type to Elevation. Click FF Plot to see the 2D elevation
> pattern.
> 5. Reconsider the statement about decoupling. . .
>
> This is admittedly contrived to show a particularly extreme case. But
> try different lengths of "feedline" either open or connected to ground
> and you'll find other cases where the feedline current is high and the
> pattern distorted. You'll also find cases where inserting a "balun"
> (high impedance load) in the "feedline" will actually increase the
> feedline current due to changing the current distribution to a value
> more favorable for the particular feedline length.
>
> Roy Lewallen, W7EL

I'd be curious to see what you get doing the same with a 1/2 wave
whip.
IE: usual j-pole, 1/2 wave whip...
I tried doing a test using the demo version. Being it was limited
segments,
I tried to keep it even, and used twice the segments for the 1/2 wave
radiator vs the 1/4 wave, but used the same amount of segments for
the "feedline" .
I also used "real ground", and the elevation plot so I could more
easily see the appx real world plots.
With the GP, I notice heavy current when the feedline is appx 1/4
wave, but not so bad when it's longer. In some cases I saw a gain

where the feed currents seem to be in phase with the antenna
currents.
When trying the 1/2 wave, I didn't see the problem too much using a
short 1/4 wave feed, but the longer lengths were much worse than
the plots for the GP.

1/4 WL GP

6.58 dbi at 3 degrees -no feedline
5.26 dbi at 42 degrees -feedline .28 wl
7.39 dbi at 3 degrees -feedline 1 wl
6.09 dbi at 3 degrees - feedline 2 wl
6.77 dbi at 3 degrees - feedline 3 wl
7.05 dbi at 3 degrees - feedline 4 wl
7.87 dbi at 3 degrees- feedline 5 wl and grounded at "0"

1/2 WL whip

6.43 dbi at 3 degrees -no feedline
6.84 dbi at 3 degrees -feedline .28 wl
6.23 dbi at 3 degrees -feedline 1 wl
6.67 dbi at 55 degrees - feedline 2 wl
14.82 dbi at 68 degrees - feedline 3 wl
21.42 dbi at 67 degrees - feedline 4 wl
6.68 dbi at 3 degrees- feedline 5 wl and grounded at "0"

Anyway, I may have had problems running this
test with the limited segments, but it seems to
show the 1/2 wave as having the worse problems
of the two overall. Really bad at 3-4 waves length
of line.
So while the decoupling for the GP is not always the
greatest, I think it's still probably less a problem
than the usual 1/2 wave whip with no decoupling.
I've never used chokes or baluns per say to decouple
a VHF vertical. I always use radial sets, cones, sleeves,
etc..
The usual ground plane really needs two radial sets to
decouple the line well. Most good sleeve dipoles will
use an extra sleeve for decoupling the line.
You might get a bit different results using unlimited segments.
But I betting the trend will still be fairly close, with the
non-decoupled 1/2 wave being the worst overall at the longer
line lengths.
MK

2002. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 13:45:23 UTC
From: nm5k@wt.net
Message-ID: <1191591923.094514.311560@o3g2000hsb.googlegroups.com>
Source record: 35684

On Oct 5, 8:39 am, n...@wt.net wrote:

BTW, you may notice the no feedline 1/2 wave shows
a higher gain than the sloping radial GP.
I'm not sure if this is right or not...
But I didn't tweak the 1/2 radiator.. It's exactly .50 wl
long..
MK

2003. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 15:11:53 UTC
From: "Kenneth Grimm, K4XL" <grimm@sbc.edu>
Message-ID: <3ukcg3ph8mmgi757lci3fufmnh8r7hflgj@4ax.com>
Source record: 35685

```
On Wed, 3 Oct 2007 19:26:59 -0400, "Jimmie D"
<GFENDER@carolina.rr.com> wrote:

>
>"Owen Duffy" <none@no.where> wrote in message
>news:Xns99BE4E32E6F6Bnonenowhere@61.9.191.5...
>> "Kenneth Grimm, K4XL" <grimm@sbc.edu> wrote in
>> news:q0n4g3lf1b1kg51mquhq63jqddljum9fam@4ax.com:
>>
>>> I'm installing a new tower and bought, as part of the package, the
>>> grounding kit. This consists of four 10 ft copper clad ground rods,
>>> plus all the accessories needed to connect them to the tower.
>>>
>>> My problem is that after about 5 feet of good old red clay I hit solid
>>> rock. I'm tempted to cut the 10 ft rods in half and simply have eight
>>> 5 ft rods. Since this is the only practical alternative that I can
>>> see.
>>>
>>> Will the eight 5 ft rods give me the same "ground" as the four 10 ft
>>> rods? Or, do I need to add even more 5 ft rods to achieve the same
>>> ground? ( I knew I should have bought that Megger at the hamfest. )
>>
>> Ken,
>>
>> Some thoughts...
>>
>> The main reason for using driven electrodes at the tower base is for
>> lightning protection. I assume that is your purpose.
>>
>> To predict the effect of driving a number of electrodes, and the depth of
>> driving, you have to consider the effect of the soil. It has high
>> resistivity, and resistivity often changes with depth. Clay soils are
>> likely to be drier at the surface, and higher in resistivity.
>>
>> So, longer electrodes are often more effective because they reach down to
>> wetter layers, and it is not unusual that an 8' electrode has a quarter
>> the resistance of a 4' electrode for that reason.
>>
>> Hitting rock isn't necessarily all bad, it sometimes happens that the
>> rock causes wetter clay above it, and shorter electrodes may be quite
>> effective.
>>
>> You can assess the likely outcome by driving two separated electrodes and
>> measuring the resistance. You can estimate the benefit of driving further
```

>> adequately spaced electrodes (assuming uniform soil).
>>
>> Dont overlook using the reinforced concrete base of the antenna as part
>> of your ground system.
>>
>> A megger! No, if your earth system is any good, a megger isn't going to
>> be useful. There are a number of techniques for measuring the effective
>> low frequency resistance of an earth electrode or earth system. Google
>> for things like the "three wire fall of potential method".
>>
>> If you can't get sufficiently good earth from driving the electrodes as
>> is, choices include drilling (more effective in soft porous wet rock) or
>> strip electrodes laid in trenches.
>>
>> As for the 30deg sledge hammer, I put some notes and a pic together on
>> tools for driving earth electrodes, see
>> http://www.vk1od.net/post/driver.htm . The smallest tool was fabricated
>> after recent discussion on using an SDS Rotary Hammer to drive earth
>> electrodes.
>>
>> Owen
>
>One way to determine the low frequency effectiveness of a ground is to
>connect the hot side of the power mains to the ground through a fuse and see
>how big of a fuse you can blow. There are special devices built for doing
>this but it can easily and safely be done with less than professional
>equipment. Just get all the pets and kids out of the way first.
>
>
>Jimmie
>

Thanks, Jimmie, but I'm not *that* interested. If anyone was doing
this, I would want to be with the pets and kids!! 8*)

Ken K4XL
k4xl@arrl.net

*** BoatAnchor Manual Archive ***
On the web at http://bama.sbc.edu and http://bama.edebris.com
FTP site info: bama.sbc.edu login: anonymous p/w: youremailadr

2004. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 16:31:28 UTC
From: richardharrison@webtv.net
Message-ID: <16641-470666E0-1434@storefull-3254.bay.webtv.net>
Source record: 35686

Jimmie D. wrote"
"One way to determine the low frequency effectiveness of a ground is to connect the hot side of the power mains to the ground through a fuse and see how big of a fuse you can blow."

Replace the fuse with a light bulb. If a high-wattage light bulb burns brightly, the earth connection is good at the power frequency.

Best regards, Richard Harrison, KB5WZI

2005. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 16:49:49 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1191602989.414910.321210@r29g2000hsg.googlegroups.com>
Source record: 35687

On Oct 5, 6:45 am, n...@wt.net wrote:
> On Oct 5, 8:39 am, n...@wt.net wrote:
>
> BTW, you may notice the no feedline 1/2 wave shows
> a higher gain than the sloping radial GP.
> I'm not sure if this is right or not...
> But I didn't tweak the 1/2 radiator.. It's exactly .50 wl
> long..
> MK

Higher?? You posted 6.34dBi for the half wave, and 6.58dBi for the quarter wave GP ... Am I misreading something, or was that a typo about which has higher gain, or what?

Thanks for taking the time to make the simulations and posting the results, Mark. And thanks to Roy for pointing out that the GP doesn't fully isolate the feedline from antenna currents. I should say "pointing out once again" as I know he's posted it before, now that I'm reminded about it. I don't have time at the moment, but put it on the list to play with in simulations when I have some time.

Still, the 1/4 wave GP is extremely easy to hack together in an emergency -- you can even strip a quarter wave of braid off coax and twist copper wire or coat hangers around the top of the braid for the GP -- and should perform comparably with other more complicated antennas. A plus is that you only need to remember (or figure out) how long 1/4 wave is to know how to cut it to get a decent, if not perfect, match.

Cheers,
Tom

2006. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 19:13:28 UTC
From: nm5k@wt.net
Message-ID: <1191611608.970246.107590@22g2000hsm.googlegroups.com>
Source record: 35688

On Oct 5, 11:49 am, K7ITM <k7...@msn.com> wrote:
> On Oct 5, 6:45 am, n...@wt.net wrote:

>
> Higher?? You posted 6.34dBi for the half wave, and 6.58dBi for the
> quarter wave GP ... Am I misreading something, or was that a typo
> about which has higher gain, or what?

Dang.. I guess I had it backwards in the 2nd post...
Normally, I would think the 1/2 whip would show slightly higher,
but dunno.. Quiver in the force I guess.
I have no real problems with either type. A 1/2 wave whip is fine
if it's decoupled.
But few J pole users seem to add decoupling sections.
Most of the ringos sold for VHF lack decoupling also..
One note.. If I build a 1/2 wave, I usually prefer to feed as a ringo,
vs as a J pole..
But I still mostly use the GP's as they are simple. I've got one up
in the attic hanging from the rafters as an emergency antenna
when T-storms are in the area and I'm chicken to use my outside
antennas.
MK

2007. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 19:42:42 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <BswNi.1051$29.485@bignews8.bellsouth.net>
Source record: 35689

nm5k@wt.net wrote:
> On Oct 5, 11:49 am, K7ITM <k7...@msn.com> wrote:
>> On Oct 5, 6:45 am, n...@wt.net wrote:
>
>> Higher?? You posted 6.34dBi for the half wave, and 6.58dBi for the
>> quarter wave GP ... Am I misreading something, or was that a typo
>> about which has higher gain, or what?
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> Dang.. I guess I had it backwards in the 2nd post...
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> One note.. If I build a 1/2 wave, I usually prefer to feed as a ringo,
> vs as a J pole..
> But I still mostly use the GP's as they are simple. I've got one up
> in the attic hanging from the rafters as an emergency antenna
> when T-storms are in the area and I'm chicken to use my outside
> antennas.
> MK
>
>
>

Yes, BUT, the 5/8th wave radiator will put more of the signal toward the horizon, instead of launching it at a 40 degree plus angle away from the horizon. So while one configuration can have higher dbi ratings, it doesn't count unless the signal goes where it will be most effective.

I have a friend (engineer) that designs and builds his boats (some rather large sailboats) with everything quantized mathematically. I showed up one day with a model sailboat sitting on a carry stand that I had made. He asked me how I calculated the angles needed to accommodate the hull accurately. He said that this problem had been bugging him for a while. I was surprised because this guy is really smart.

I grabbed two rulers and put each one along the side of the boat and then clamped them at that angle. I then transferred the angle of the two rulers to a sheet of paper by simply drawing lines along the inside of the v that was created. His jaw dropped in surprise. He was amazed at how easy the process was and he realized that the same process would work with his full size boats. No math required.

While EZNEC is a fantastic program, it is no better than the programmer that wrote it. No one person can take absolutely every variable into consideration because many of them are very, very complex and nearly impossible to quantize.

I suggested a simple 1/2 wave J-pole antenna earlier that was easy to make, super easy to tune and one that worked very effectively. Yet everyone is beating their brains out trying to come up with the best 5/8th wave J-pole, even though this design will require lossy matching devices to get the impedance down to a manageable/acceptable level. What's up wid dat?

I do realize that figuring out such a design is fun in and of itself and may be the real purpose of the exercise. Still, I'll betcha no one on the receiving end of the OP's signal could tell if he was using the 5/8th wavelength J-pole or the 1/2 wavelength J-pole.

Ed, NM2K

2008. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 20:59:41 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99C1471BA192Anonenowhere@61.9.191.5>
Source record: 35690

K7ITM <k7itm@msn.com> wrote in news:1191602989.414910.321210
@r29g2000hsg.googlegroups.com:

...
> results, Mark. And thanks to Roy for pointing out that the GP doesn't
> fully isolate the feedline from antenna currents. I should say
> "pointing out once again" as I know he's posted it before, now that
> I'm reminded about it. I don't have time at the moment, but put it on
> the list to play with in simulations when I have some time.

It is an interesting topic for modelling.

I wrote some notes up after modelling an unloaded elevated vertical as a multi-band HF antenna. I was particularly interested in the effectiveness of decoupling of the mast / feedline and the loss implications of mast current flowing to ground. The article is at http://www.vk1od.net/multibandunloadedvertical/13mEV.htm . The spikes in loss in Fig 3 and 4 are mainly due to loss in the simulated resistance of the earth connection at the lower end of the mast.

So, the issue is not just about pattern distortion, efficiency may be impacted significantly.

One of the popular antennas amongst our new six hour hams is to use their StationMaster on 40m and 80m The StationMaster is a half wave vertical for 27MHz base fed with a parallel tuned circuit and the 50 ohm coax is tapped onto the coil of the tuned circuit. (A 27MHz version of the once popular ham ringo... but the coil is multi turn.)

When modelled on a 10m high mast on 40m and 80m, most of the current moment contribution is from the support mast and the efficiency is low due to losses in mast current flowing to lossy ground. Additionally, there a huge transmission line losses. It is a top fed dummy load... but with the magic of an ATU, it has a VSWR of 1:1!

But, when their investment in ham radio is 6 hours of learning, they aren't well equipped to appreciate that the StationMaster isn't an efficient antenna on 40m and 80m.

Owen

2009. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 21:00:15 UTC
From: nm5k@wt.net
Message-ID: <1191618015.097611.222110@w3g2000hsg.googlegroups.com>
Source record: 35691

On Oct 5, 2:42 pm, Ed Cregger <ecreg...@bellsouff.net> wrote:
> n...@wt.net wrote:
> > On Oct 5, 11:49 am, K7ITM <k7...@msn.com> wrote:
> >> On Oct 5, 6:45 am, n...@wt.net wrote:
>
> >> Higher?? You posted 6.34dBi for the half wave, and 6.58dBi for the
> >> quarter wave GP ... Am I misreading something, or was that a typo
> >> about which has higher gain, or what?
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> > Normally, I would think the 1/2 whip would show slightly higher,
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> > if it's decoupled.
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> > But I still mostly use the GP's as they are simple. I've got one up
> > in the attic hanging from the rafters as an emergency antenna
> > when T-storms are in the area and I'm chicken to use my outside
> > antennas.
> > MK
>
> Yes, BUT, the 5/8th wave radiator will put more of the signal toward the
> horizon, instead of launching it at a 40 degree plus angle away from the
> horizon. So while one configuration can have higher dbi ratings, it
> doesn't count unless the signal goes where it will be most effective.

Dunno.. You sure you ain't got it backwards? Unless the 5/8 is on a
large
ground plane, etc, it's usually the one with the higher avg launch
angles
vs the 1/2 wave.
The 5/8 with no radials should be pretty bad at that.. Even a set of
1/4 wave radials under a 5/8 will give a fairly poor pattern.
If I were to build a j pole, it would be a 1/2 wave.
If I run a 5/8, I'd have two elements as a collinear, or at least
have 5/8 or 3/4 wave radials. I'd never run just a single 5/8 wave
radiator
on it's own. It's not a "complete" antenna like a 1/2 wave j pole is.
Or to my way of qualifying anyway...
MK

2010. Antennas guilty of RFI?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 21:00:58 UTC
From: ZL2DG Dave <zl2dg@ihug.co.nz>
Message-ID: <fe68l2jgf1@lust.ihug.co.nz>
Source record: 35692

I believe antenna feedlines can be a source of rfi.The radiation from an antenna should be much greater than any feeder radiation_why the emphasis on feeder radiation? 73 de ZL2DG

2011. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 21:04:08 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99C147DCEA6EDnonenowhere@61.9.191.5>
Source record: 35693

richardharrison@webtv.net (Richard Harrison) wrote in news:16641-470666E0-1434@storefull-3254.bay.webtv.net:

...
> Replace the fuse with a light bulb. If a high-wattage light bulb burns
> brightly, the earth connection is good at the power frequency.

Yet another calibrated screw driver approach. The undefined quantities "high-wattage" and "burns brightly" characterise the accuracy of the method.

There are simple and safe methods for passing a known or measurable current through a ground system and measuring the ground system potential rise above the general mass of earth... a bit of Googling will turn up far better methods that some of those described in this thread.

Owen

2012. Re: Antennas guilty of RFI?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 21:56:53 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99C150CE649D0nonenowhere@61.9.191.5>
Source record: 35694

"ZL2DG Dave" <zl2dg@ihug.co.nz> wrote in
news:fe68l2jgf1@lust.ihug.co.nz:

> I believe antenna feedlines can be a source of rfi.The radiation from
> an antenna should be much greater than any feeder radiation_why the
> emphasis on feeder radiation? 73 de ZL2DG

Dave,

"should" being the operative word.

It isn't always the case that feedline radiation is insignificant. Keep in mind that the transmitter feedline might also be much closer to the affected device, its power line and its feedline.

It is also fair to say that there is a whole family of ham myths that revolve around feedlines being the cause of RFI, TVI, generation of harmonics, causual links between open wire feedline and interference, etc.

Owen

2013. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 23:31:23 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fe6hhd$h1a$1@news.service.uci.edu>
Source record: 35695

Ed Cregger wrote:

> Yes, BUT, the 5/8th wave radiator will put more of the signal toward the
> horizon, instead of launching it at a 40 degree plus angle away from the
> horizon. So while one configuration can have higher dbi ratings, it
> doesn't count unless the signal goes where it will be most effective.

That is born out here:

http://www.cebik.com/gp/58.html

> I have a friend (engineer) that designs and builds his boats (some
> rather large sailboats) with everything quantized mathematically. I
> showed up one day with a model sailboat sitting on a carry stand that I
> had made. He asked me how I calculated the angles needed to accommodate
> the hull accurately. He said that this problem had been bugging him for
> a while. I was surprised because this guy is really smart.
>
> I grabbed two rulers and put each one along the side of the boat and
> then clamped them at that angle. I then transferred the angle of the two
> rulers to a sheet of paper by simply drawing lines along the inside of
> the v that was created. His jaw dropped in surprise. He was amazed at
> how easy the process was and he realized that the same process would
> work with his full size boats. No math required.
>
> While EZNEC is a fantastic program, it is no better than the programmer
> that wrote it. No one person can take absolutely every variable into
> consideration because many of them are very, very complex and nearly
> impossible to quantize.
>
> I suggested a simple 1/2 wave J-pole antenna earlier that was easy to
> make, super easy to tune and one that worked very effectively. Yet
> everyone is beating their brains out trying to come up with the best
> 5/8th wave J-pole, even though this design will require lossy matching
> devices to get the impedance down to a manageable/acceptable level.
> What's up wid dat?
>
> I do realize that figuring out such a design is fun in and of itself and
> may be the real purpose of the exercise. Still, I'll betcha no one on
> the receiving end of the OP's signal could tell if he was using the
> 5/8th wavelength J-pole or the 1/2 wavelength J-pole.

W4RNL may have provided the definitive work on the subject.

http://www.cebik.com/vhf/jp4.html

>
> Ed, NM2K

73, ac6xg

2014. VOACAP/Linux. Has anyone here done this?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-05 23:50:53 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1191628253.719294.306190@57g2000hsv.googlegroups.com>
Source record: 35696

Surfin': Linuxating VOACAP

By Stan Horzepa, WA1LOU
Contributing Editor
October 05, 2007

Jari Perkiömäki, OH6BG, wrote recently to inform me that VOACAP, the free professional HF propagation prediction program from National Telecommunications and Information Administration's Institute for Telecommunication Sciences (NTIA/ITS), is now available as a Linux application. In addition, VOACAP now has a graphical user interface (GUI) to make inputting and outputting data easier.

VOACAP is the initialism for Voice of America Coverage Analysis Program (for HF Propagation Prediction and Ionospheric Communications Analysis). It may be an acronym, too (vo-ah-cap), but I cannot attest to ever hearing anyone using it that way.

VOACAP is the result of more than 50 years of US HF research and development and many consider it to be "the most professional HF system performance prediction tool available on the market." VOA and other international HF broadcasters currently use the program for HF frequency planning.

Originally a UNIX program, the official release of VOACAP is a Windows program. This project represents an effort to compile the program's source code on Linux/Mac OS X. Take a look at Jim Watson's, M0DNS, VOACAP on Linux Web page for source code, output scripts, installation information and such. Also, check out Jari's VOACAP Quick Guide for general information about VOACAP and the new GUI.

2015. The varmints [not the dog] chewed my ladderline!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 02:47:24 UTC
From: Joaquin Tall <opalockamishabob@netscape.net>
Message-ID: <FYednUsI6_ONa5vanZ2dnUVZ_vOlnZ2d@nethere.com>
Source record: 35697

Hello All,

Brisk winds blew through our area yesterday and, unfortunately, my 200' G5RV's feedline touched ground overnight.

This morning I noticed that there were chew marks over 40' of the ladderline; most went deep enough to expose the copper wire underneath. We live in the country...

I called the manufacturer; they told me that "splicing/soldering" in a 40' length of 300 ohm line to replace the chewed up line would upset the SWR and almost make the antenna useless. It's the solder joints [no matter how small] that would mess things up.

I used some silicone calk to cover the bite marks; ever try to smooth out calk on twinlead!?

Do I need to remove/replace the feedpoint and the 40' of the twinlead, in other words make most of the antenna over again?

Any options to make the antenna whole again, the above draconian measure notwithstanding?

Many thanks for taking the time to repond!

Alain

2016. Re: The varmints [not the dog] chewed my ladderline!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 03:19:33 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ejudg39h8ht9lqmpj1md9v0ke41fv88ukq@4ax.com>
Source record: 35698

On Fri, 5 Oct 2007 19:47:24 -0700, "Joaquin Tall"
<opalockamishabob@netscape.net> wrote:

>Hello All,
>
>Brisk winds blew through our area yesterday and, unfortunately, my 200'
>G5RV's feedline touched ground overnight.

Sorry to hear that.

>This morning I noticed that there were chew marks over 40' of the
>ladderline; most went deep enough to expose the copper wire underneath. We
>live in the country...

Life in the city is not all its cracked up to be either.

>I called the manufacturer; they told me that "splicing/soldering" in a 40'
>length of 300 ohm line to replace the chewed up line would upset the SWR and
>almost make the antenna useless.

It's remarkable how there's a new flavor of baloney posted here at
least once a week.

>It's the solder joints [no matter how
>small] that would mess things up.

Sounds like a McHales Navy re-run from that crew you called.

>I used some silicone calk to cover the bite marks; ever try to smooth out
>calk on twinlead!?

Real easy if you use a wet rag or just wet hands. Wet is the keyword
and it is water cured.

>Do I need to remove/replace the feedpoint and the 40' of the twinlead, in
>other words make most of the antenna over again?

You don't even need to silicone calk it. Insulation is not all its
cracked up to be either (the copper is already insulating itself as we
pass these messages back and forth).

>Any options to make the antenna whole again, the above draconian measure
>notwithstanding?

Lift it back up in the air and fire up the rig. After all, you didn't
notice you had a "problem" until you LOOKED at it, did you?

Now, the chances are you are going to be hypersensitive about any
changes you make, or you don't make. It will SEEM that the antenna is

not operating as it had before. Blame it on the weather, it wasn't going operate the same as it had before anyway - even if it never fell - even if the bugs hadn't chewed it.

73's
Richard Clark, KB7QHC

2017. Re: Antennas guilty of RFI?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 04:48:00 UTC
From: Dave Oldridge <doldridg@leavethisoutshaw.ca>
Message-ID: <Xns99C0DDC53562Adoldridgsprintca@64.59.135.159>
Source record: 35699

"ZL2DG Dave" <zl2dg@ihug.co.nz> wrote in
news:fe68l2jgf1@lust.ihug.co.nz:

> I believe antenna feedlines can be a source of rfi.The radiation from
> an antenna should be much greater than any feeder radiation_why the
> emphasis on feeder radiation? 73 de ZL2DG

Because feeders often pass near consumer electronics.

If the feeder has no antenna currents on it (like my feeder years ago when I had a vertical 250 feet out from the house), then the antenna, while radiating much more than the feedline is far enough away that the inverse square law protects the consumer electronics.

Of course this depends on antenna placement.

--
Dave Oldridge+
ICQ 1800667

2018. Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 06:01:24 UTC
From: "Green Xenon [Radium]" <glucegen1@excite.com>
Message-ID: <47072242$0$15384$4c368faf@roadrunner.com>
Source record: 35700
Cross-posted to: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit

Hi:

Let's say I am in a space station which has a 2 GHz DX AM analog receiver that receives the magnetic fields [while ignoring the electric fields] of extremely weak 2 GHz AM analog carrier signals. In addition, this receiver is so sensitive and powerful that it can clearly pick up AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000 watt-per-meter-squared. This receiver also has a robust signal processor that can eliminate clipped-waveforms [such as square waves], spikes, clicks, pops, hiss, and random noise even at those trivial wattage levels. After eliminating those unwanted signals, the carrier wave is amplified. This receiver has an astronomically-powerful amplifier which amplifies those extremely-soft carrier waves until the resulting modulation signals will be just loud enough for the human ear to coherently detect. Following this amplification, the carrier waves are demodulated to modulation waves -- the stuff we "hear" -- and then sent to loudspeaker so those onboard can hear those sounds.

Equally important, the 2-GHz receiver is pointed away from the earth to assist in preventing the pickup of signals generated from Earth.

If I am on this spaceship, what will I most likely hear on the radio?

Thanks,

Radium

2019. Re: VOACAP/Linux. Has anyone here done this?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 08:22:22 UTC
From: Tehrasha Darkon <darkon@netins.net>
Message-ID: <pan.2007.10.06.08.22.32@netins.net>
Source record: 35701

On Fri, 05 Oct 2007 16:50:53 -0700, hot-ham-and-cheese wrote:

> Surfin': Linuxating VOACAP

I havent tried VOACAP under Linux (a link would have been nice, but
google managed) http://lipas.uwasa.fi/~jpe/voacap/

But I have been running VOAPROP (a windows program) in Linux with WINE.
http://www.g4ilo.com/voaprop.html

--Teh

2020. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 10:49:51 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <XcGdnXvMCdSD9Zra4p2dnAA@bt.com>
Source record: 35702
Cross-posted to: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

"Green Xenon [Radium]" <glucegen1@excite.com> wrote in message
news:47072242$0$15384$4c368faf@roadrunner.com...
> Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> Content-Transfer-Encoding: 7bit
>
> Hi:
>
> Let's say I am in a space station which has a 2 GHz DX AM analog
> receiver that receives the magnetic fields [while ignoring the electric
> fields] of extremely weak 2 GHz AM analog carrier signals. In addition,
> this receiver is so sensitive and powerful that it can clearly pick up
> AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000
> watt-per-meter-squared. This receiver also has a robust signal processor
> that can eliminate clipped-waveforms [such as square waves], spikes,
> clicks, pops, hiss, and random noise even at those trivial wattage
> levels. After eliminating those unwanted signals, the carrier wave is
> amplified. This receiver has an astronomically-powerful amplifier which
> amplifies those extremely-soft carrier waves until the resulting
> modulation signals will be just loud enough for the human ear to
> coherently detect. Following this amplification, the carrier waves are
> demodulated to modulation waves -- the stuff we "hear" -- and then sent
> to loudspeaker so those onboard can hear those sounds.
>
> Equally important, the 2-GHz receiver is pointed away from the earth to
> assist in preventing the pickup of signals generated from Earth.
>
> If I am on this spaceship, what will I most likely hear on the radio?
>
>
> Thanks,
>
> Radium

Radium

Simon & Garfunkel - The Sound of Silence

Mike G0ULI

2021. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 12:17:49 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1191673069.917740.92540@o3g2000hsb.googlegroups.com>
Source record: 35703

n...@wt.net wrote:
> On Oct 2, 2:06 pm, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
>
> >
> > The small theroretical gain advantage that a 5/8wl radiator has over a 1/2wl
> > radiator is dependent on it having a very good counterpoise. However one
> > may be able to fabricate a 5/8wl antenna with a couterpoise matched to the
> > feedline with a stub made of metal tubing.
> >
> > Jimmie
> The best "counterpoise" for a 5/8 radiator is a set of 5/8 radials...
> But in that case, it's more of a collinear.
> Myself, I think a 5/8 radiator should always be used with a 5/8
> lower section of you want the full performance. IE: dual 5/8
> collinear.
> Anything else is a perversion... :/
> My 2nd choice would be to use 3/4 wave radials.
> 1/2 wave radials would be useless.
> 1/4 wave radials are semi useless, and give a lousy pattern..
> MK

I like the 5/8th on VHF because it has noticably more gain than a
1/4wl groundplane and in my opinon is easier to build and match than
an end-fed 1/2wl antenna.

Jimmie

2022. Re: Antennas guilty of RFI?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 12:39:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13gf0g5os1jvm04@corp.supernews.com>
Source record: 35704

Dave Oldridge wrote:
> "ZL2DG Dave" <zl2dg@ihug.co.nz> wrote in
> news:fe68l2jgf1@lust.ihug.co.nz:
>
>> I believe antenna feedlines can be a source of rfi.The radiation from
>> an antenna should be much greater than any feeder radiation_why the
>> emphasis on feeder radiation? 73 de ZL2DG
>
> Because feeders often pass near consumer electronics.
>
> If the feeder has no antenna currents on it (like my feeder years ago when
> I had a vertical 250 feet out from the house), then the antenna, while
> radiating much more than the feedline is far enough away that the inverse
> square law protects the consumer electronics.
>
> Of course this depends on antenna placement.

The improvement noted by increasing the distance between the radiating conductor and the consumer electronics (or power or other wiring they're connected to) can be much greater than an "inverse square law" would imply.

That's because a lot of the problems with interference occur in the near field of the radiating conductor. In the far field, the field strength is inversely proportional to the distance (the power density follows the "inverse square law"). But in some parts of the near field, the field strength varies as the inverse *cube* of the distance. So even a small increase in distance can often have quite a dramatic effect on interference level.

Roy Lewallen, W7EL

2023. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 12:48:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13gf1087e8nj7e2@corp.supernews.com>
Source record: 35705
Cross-posted to: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

Green Xenon [Radium] wrote:
> Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> Content-Transfer-Encoding: 7bit
>
> Hi:
>
> Let's say I am in a space station which has a 2 GHz DX AM analog
> receiver that receives the magnetic fields [while ignoring the electric
> fields] of extremely weak 2 GHz AM analog carrier signals. In addition,
> this receiver is so sensitive and powerful that it can clearly pick up
> AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000
> watt-per-meter-squared. This receiver also has a robust signal processor
> that can eliminate clipped-waveforms [such as square waves], spikes,
> clicks, pops, hiss, and random noise even at those trivial wattage
> levels. After eliminating those unwanted signals, the carrier wave is
> amplified. This receiver has an astronomically-powerful amplifier which
> amplifies those extremely-soft carrier waves until the resulting
> modulation signals will be just loud enough for the human ear to
> coherently detect. Following this amplification, the carrier waves are
> demodulated to modulation waves -- the stuff we "hear" -- and then sent
> to loudspeaker so those onboard can hear those sounds.
>
> Equally important, the 2-GHz receiver is pointed away from the earth to
> assist in preventing the pickup of signals generated from Earth.
>
> If I am on this spaceship, what will I most likely hear on the radio?
>
>
> Thanks,
>
> Radium

Depends on where you are. Electromagnetic emissions from the Earth greatly increased after WW II with the advent of widespread television broadcasting. This resulted in a veritable step function in the sphere of energy expanding as it races away from the Earth at the speed of light. On the very leading edge of that sphere of energy are the Howdy Doody Show and the McCarthy hearings. This explains why no aliens have ever visited the Earth. But it sounds like programming that's right up your alley. If you can find that sweet spot in space, sit back and enjoy.

Plutonium

2024. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 12:53:51 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1191675231.666361.123760@d55g2000hsg.googlegroups.com>
Source record: 35706

Richard Harrison wrote:
> Jimmie D. wrote"
> "One way to determine the low frequency effectiveness of a ground is to
> connect the hot side of the power mains to the ground through a fuse and
> see how big of a fuse you can blow."
>
> Replace the fuse with a light bulb. If a high-wattage light bulb burns
> brightly, the earth connection is good at the power frequency.
>
> Best regards, Richard Harrison, KB5WZI

Tried that, I couldnt discern the difference between a 10 ohm ground
and a 25 ohm ground. The "blown fuse method" really works well and is
no where as dangerous as people make it to be. I Have a little deal
made up out of PVC pipe with a fuse holder and neon indicator to let
me know whether the fuse blew or not.

Please tell me, how is this any more dangerous that troubleshooting
under the chassis of a tube receiver.

Jimmie

2025. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 13:24:49 UTC
From: George Dishman <george@briar.demon.co.uk>
Message-ID: <h96dnQaszsH-FpranZ2dneKdnZydnZ2d@pipex.net>
Source record: 35707
Cross-posted to: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

"Green Xenon [Radium]" <glucegen1@excite.com> wrote in message
news:47072242$0$15384$4c368faf@roadrunner.com...
...
> ... This receiver also has a robust signal processor
> that can eliminate clipped-waveforms [such as square waves], spikes,
> clicks, pops, hiss, and random noise even at those trivial wattage
> levels. After eliminating those unwanted signals, the carrier wave is
> amplified.

There is no carrier, it was one of those signals you just
eliminated.

> If I am on this spaceship, what will I most likely hear on the radio?

Stop trying to troll, you are too stupid to pull it off.

<Plonk>

2026. Re: The varmints [not the dog] chewed my ladderline!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 13:41:49 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1191678109.017171.239900@57g2000hsv.googlegroups.com>
Source record: 35708

Joaquin Tall wrote:
> Hello All,
>
> Brisk winds blew through our area yesterday and, unfortunately, my 200'
> G5RV's feedline touched ground overnight.
>
> This morning I noticed that there were chew marks over 40' of the
> ladderline; most went deep enough to expose the copper wire underneath. We
> live in the country...
>
> I called the manufacturer; they told me that "splicing/soldering" in a 40'
> length of 300 ohm line to replace the chewed up line would upset the SWR and
> almost make the antenna useless. It's the solder joints [no matter how
> small] that would mess things up.
>
> I used some silicone calk to cover the bite marks; ever try to smooth out
> calk on twinlead!?
>
> Do I need to remove/replace the feedpoint and the 40' of the twinlead, in
> other words make most of the antenna over again?
>
> Any options to make the antenna whole again, the above draconian measure
> notwithstanding?
>
> Many thanks for taking the time to repond!
>
> Alain

2027. Re: The varmints [not the dog] chewed my ladderline!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 13:50:36 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1191678636.577285.318490@r29g2000hsg.googlegroups.com>
Source record: 35709

Joaquin Tall wrote:
> Hello All,
>
> Brisk winds blew through our area yesterday and, unfortunately, my 200'
> G5RV's feedline touched ground overnight.
>
> This morning I noticed that there were chew marks over 40' of the
> ladderline; most went deep enough to expose the copper wire underneath. We
> live in the country...
>
> I called the manufacturer; they told me that "splicing/soldering" in a 40'
> length of 300 ohm line to replace the chewed up line would upset the SWR and
> almost make the antenna useless. It's the solder joints [no matter how
> small] that would mess things up.
>
> I used some silicone calk to cover the bite marks; ever try to smooth out
> calk on twinlead!?
>
> Do I need to remove/replace the feedpoint and the 40' of the twinlead, in
> other words make most of the antenna over again?
>
> Any options to make the antenna whole again, the above draconian measure
> notwithstanding?
>
> Many thanks for taking the time to repond!
>
> Alain

The manufacturer is really blowing smoke, You could replace the
feedline, insulate with silicone, or just dont do anything as long as
the wire isnt damage. twinlead works just fine with bare wire.

Jimmie

2028. Re: The varmints [not the dog] chewed my ladderline!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 14:26:48 UTC
From: Dave <noone@nowhere.com>
Message-ID: <IWMNi.142$q42.17@trndny06>
Source record: 35710

"Joaquin Tall" <opalockamishabob@netscape.net> wrote in message
news:FYednUsI6_ONa5vanZ2dnUVZ_vOlnZ2d@nethere.com...
> Hello All,
>
> Brisk winds blew through our area yesterday and, unfortunately, my 200'
> G5RV's feedline touched ground overnight.
>
> This morning I noticed that there were chew marks over 40' of the
> ladderline; most went deep enough to expose the copper wire underneath. We
> live in the country...
>
> I called the manufacturer; they told me that "splicing/soldering" in a 40'
> length of 300 ohm line to replace the chewed up line would upset the SWR
> and almost make the antenna useless. It's the solder joints [no matter how
> small] that would mess things up.
>
> I used some silicone calk to cover the bite marks; ever try to smooth out
> calk on twinlead!?
>
> Do I need to remove/replace the feedpoint and the 40' of the twinlead, in
> other words make most of the antenna over again?
>
> Any options to make the antenna whole again, the above draconian measure
> notwithstanding?
>
> Many thanks for taking the time to repond!
>
> Alain
>
its the impedance, not the solder joints, that would mess things up. if you
got a piece of the same impedance ladder line you could spice it just fine.
but as long as the bite marks don't break the wire then adding a bit of
caulk is as good as anything else to fix it for now.

2029. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 14:46:59 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ut7fg3tn272ruddo3vvgg4a10br652gqpv@4ax.com>
Source record: 35711

On Sat, 06 Oct 2007 05:53:51 -0700, JIMMIE <JIMMIEDEE123@YAHOO.COM>
wrote:

>Please tell me, how is this any more dangerous that troubleshooting
>under the chassis of a tube receiver.

You are holding one conductor, and standing on the other.

2030. Re: The varmints [not the dog] chewed my ladderline!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 15:14:31 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <el8fg3dbjgrk08ucnvgnvh2vg3g39i84eb@4ax.com>
Source record: 35712

On Sat, 06 Oct 2007 14:26:48 GMT, "Dave" <noone@nowhere.com> wrote:

>
>"Joaquin Tall" <opalockamishabob@netscape.net> wrote in message
>news:FYednUsI6_ONa5vanZ2dnUVZ_vOlnZ2d@nethere.com...
>> Hello All,
>>
>> Brisk winds blew through our area yesterday and, unfortunately, my 200'
>> G5RV's feedline touched ground overnight.
>>
>> This morning I noticed that there were chew marks over 40' of the
>> ladderline; most went deep enough to expose the copper wire underneath. We
>> live in the country...
>>
>> I called the manufacturer; they told me that "splicing/soldering" in a 40'
>> length of 300 ohm line to replace the chewed up line would upset the SWR
>> and almost make the antenna useless. It's the solder joints [no matter how
>> small] that would mess things up.

That mfgr is not just blowing smoke, he's making an erroneous statement , hoping you'll bite and buy some more
of his product, and at the same time starting another myth that we don't need.

If you're using 300-ohm line I assume you're also using an antenna tuner to match the line to the transmitter.
If this is the case then the line impedance is immaterial, because you could remove the chewed-up portion and
replace it with 450-ohm or 600-ohm line, or whatever impedance line, and adjusting the tuner for an input of
50 ohms will have compensated for the different line impedances along the way. The only result from using
different line impedances is that the SWR will be different on the line sections having the different
characteristic impedances.

The length of 450-ohm line I had available wouldn't reach from the tuner to the terminals of my 80-meter
dipole, but I had a lot of 300-ohm line. So I just used the 300-ohm line to make up the shortfall in the
450-ohm line. Works just fine. Yours will too.

Walt, W2DU

2031. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 17:08:00 UTC
From: Bill Ward <bward@REMOVETHISix.netcom.com>
Message-ID: <pan.2007.10.06.17.07.57.376214@REMOVETHISix.netcom.com>
Source record: 35713
Cross-posted to: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

On Fri, 05 Oct 2007 23:01:24 -0700, Green Xenon [Radium] wrote:

> Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> Content-Transfer-Encoding: 7bit
>
> Hi:
>
> Let's say I am in a space station which has a 2 GHz DX AM analog receiver
> that receives the magnetic fields [while ignoring the electric fields] of
> extremely weak 2 GHz AM analog carrier signals. In addition, this receiver
> is so sensitive and powerful that it can clearly pick up AM carrier waves
> as weak as 10-to-the-power-NEGATIVE-10,000 watt-per-meter-squared. This
> receiver also has a robust signal processor that can eliminate
> clipped-waveforms [such as square waves], spikes, clicks, pops, hiss, and
> random noise even at those trivial wattage levels. After eliminating those
> unwanted signals, the carrier wave is amplified. This receiver has an
> astronomically-powerful amplifier which amplifies those extremely-soft
> carrier waves until the resulting modulation signals will be just loud
> enough for the human ear to coherently detect. Following this
> amplification, the carrier waves are demodulated to modulation waves --
> the stuff we "hear" -- and then sent to loudspeaker so those onboard can
> hear those sounds.
>
> Equally important, the 2-GHz receiver is pointed away from the earth to
> assist in preventing the pickup of signals generated from Earth.
>
> If I am on this spaceship, what will I most likely hear on the radio?

Mother telling you to quit playing in the cardboard box and come to
dinner.

2032. yaesu FT-817ND without antenna tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 19:05:01 UTC
From: James Barrett <xucaen@comcast.net>
Message-ID: <irCdndDMrfKhQZranZ2dnUVZ_rKtnZ2d@comcast.com>
Source record: 35714

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Hi, I'm a new ham, and I'm looking for my first HF transceiver. I am
considering the Yaesu FT-817ND. I did some google searches and could not
find any information about using an antenna tuner with this rig. How can
it work on all bands without a tuner? Would I need a tuner or does the
supplied antenna work on all bands without a tuner? I browsed the
owner's manual on Yaesu's web site as well and didn't see any mention
about using a tuner. The link to yaesu's page is
http://www.yaesu.com/indexVS.cfm?cmd=DisplayProducts&ProdCatID=102&encProdID=06014CD0AFA07
02B25B12AB4DC9C0D27&DivisionID=65&isArchived=0
I read some reviews on eHam too, and it almost sounds like the FT-817ND
doesn't need a tuner.. I'm confused.
Any opinions would be helpful.

Thanks!
Jim
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.4.6 (GNU/Linux)

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g25V9E2uKv0sgAClBD9zyb0=
=BD4f
-----END PGP SIGNATURE-----
```

2033. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 19:45:49 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <4707e5d6$0$11042$4c368faf@roadrunner.com>
Source record: 35715

"Richard Clark" <kb7qhc@comcast.net> wrote in message
news:ut7fg3tn272ruddo3vvgg4a10br652gqpv@4ax.com...
> On Sat, 06 Oct 2007 05:53:51 -0700, JIMMIE <JIMMIEDEE123@YAHOO.COM>
> wrote:
>
>>Please tell me, how is this any more dangerous that troubleshooting
>>under the chassis of a tube receiver.
>
> You are holding one conductor, and standing on the other.

You dont have to do it that way, You are assuming the worst possible
condition. It can be done safely.

Jimmie

2034. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 20:00:55 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <4707e99b$0$4964$4c368faf@roadrunner.com>
Source record: 35716

"Owen Duffy" <none@no.where> wrote in message
news:Xns99C147DCEA6EDnonenowhere@61.9.191.5...
> richardharrison@webtv.net (Richard Harrison) wrote in news:16641-470666E0-
> 1434@storefull-3254.bay.webtv.net:
>
> ...
>> Replace the fuse with a light bulb. If a high-wattage light bulb burns
>> brightly, the earth connection is good at the power frequency.
>
> Yet another calibrated screw driver approach. The undefined quantities
> "high-wattage" and "burns brightly" characterise the accuracy of the
> method.
>
> There are simple and safe methods for passing a known or measurable
> current
> through a ground system and measuring the ground system potential rise
> above the general mass of earth... a bit of Googling will turn up far
> better methods that some of those described in this thread.
>
> Owen

Depends on what you call "better". Blowing a fuse is cheap, accurate enough
for most practical purposes and people with reasonable common sense and
experience with electricity can do it safely. If more accurate results are
required, If your experience level will not allow you do do it safely then
by all means find some other way.

Jimmie

2035. Re: yaesu FT-817ND without antenna tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 20:02:13 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99C184A16FD27HuckleberryREMOVEbig@198.186.192.196>
Source record: 35717

> Hi, I'm a new ham, and I'm looking for my first HF transceiver. I am
> considering the Yaesu FT-817ND. I did some google searches and could
> not find any information about using an antenna tuner with this rig.
> How can it work on all bands without a tuner? Would I need a tuner or
> does the supplied antenna work on all bands without a tuner?

I'm not sure what you are referring to regarding the "supplied antenna". The FT-817 does come with a small VHF antenna for 2 meter operation, but like all other HF transceivers, it does not come with any HF antenna. You can build yourself some dipole antennas for the bands you want to operate on.... they would be resonant and have a 50 ohm feedpoint so you would not need any tuner.... (the output connection to almost all radios has a 50 ohm impedance). If you want to use a non-resonant antenna, then an outboard Tuner should work fine.... as long as it is capable of operating at low power levels of 5Watts or less. LDG Electronics makes some fine QRP type tuners. My old LDG Z-11 tuner works great with my FT-817.

Ed K7AAT

2036. Re: The varmints [not the dog] chewed my ladderline!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 20:03:11 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <4707e9ed$0$19568$4c368faf@roadrunner.com>
Source record: 35718

"JIMMIE" <JIMMIEDEE123@YAHOO.COM> wrote in message
news:1191678636.577285.318490@r29g2000hsg.googlegroups.com...
>
> Joaquin Tall wrote:
>> Hello All,
>>
>> Brisk winds blew through our area yesterday and, unfortunately, my 200'
>> G5RV's feedline touched ground overnight.
>>
>> This morning I noticed that there were chew marks over 40' of the
>> ladderline; most went deep enough to expose the copper wire underneath.
>> We
>> live in the country...
>>
>> I called the manufacturer; they told me that "splicing/soldering" in a
>> 40'
>> length of 300 ohm line to replace the chewed up line would upset the SWR
>> and
>> almost make the antenna useless. It's the solder joints [no matter how
>> small] that would mess things up.
>>
>> I used some silicone calk to cover the bite marks; ever try to smooth out
>> calk on twinlead!?
>>
>> Do I need to remove/replace the feedpoint and the 40' of the twinlead, in
>> other words make most of the antenna over again?
>>
>> Any options to make the antenna whole again, the above draconian measure
>> notwithstanding?
>>
>> Many thanks for taking the time to repond!
>>
>> Alain
>
> The manufacturer is really blowing smoke, You could replace the
> feedline, insulate with silicone, or just dont do anything as long as
> the wire isnt damage. twinlead works just fine with bare wire.
>
>
> Jimmie
>

oops, should have said just do nothing.

Jimmie

2037. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 20:19:31 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <4707edc3$0$32556$4c368faf@roadrunner.com>
Source record: 35719

<nm5k@wt.net> wrote in message
news:1191618015.097611.222110@w3g2000hsg.googlegroups.com...
> On Oct 5, 2:42 pm, Ed Cregger <ecreg...@bellsouff.net> wrote:
>> n...@wt.net wrote:
>> > On Oct 5, 11:49 am, K7ITM <k7...@msn.com> wrote:
>> >> On Oct 5, 6:45 am, n...@wt.net wrote:
>>
>> >> Higher?? You posted 6.34dBi for the half wave, and 6.58dBi for the
>> >> quarter wave GP ... Am I misreading something, or was that a typo
>> >> about which has higher gain, or what?
>>
>> > Dang.. I guess I had it backwards in the 2nd post...
>> > Normally, I would think the 1/2 whip would show slightly higher,
>> > but dunno.. Quiver in the force I guess.
>> > I have no real problems with either type. A 1/2 wave whip is fine
>> > if it's decoupled.
>> > But few J pole users seem to add decoupling sections.
>> > Most of the ringos sold for VHF lack decoupling also..
>> > One note.. If I build a 1/2 wave, I usually prefer to feed as a ringo,
>> > vs as a J pole..
>> > But I still mostly use the GP's as they are simple. I've got one up
>> > in the attic hanging from the rafters as an emergency antenna
>> > when T-storms are in the area and I'm chicken to use my outside
>> > antennas.
>> > MK
>>
>> Yes, BUT, the 5/8th wave radiator will put more of the signal toward the
>> horizon, instead of launching it at a 40 degree plus angle away from the
>> horizon. So while one configuration can have higher dbi ratings, it
>> doesn't count unless the signal goes where it will be most effective.
>
> Dunno.. You sure you ain't got it backwards? Unless the 5/8 is on a
> large
> ground plane, etc, it's usually the one with the higher avg launch
> angles
> vs the 1/2 wave.
> The 5/8 with no radials should be pretty bad at that.. Even a set of
> 1/4 wave radials under a 5/8 will give a fairly poor pattern.

If I remember correctly the oft quoted theorotical gain of a 5/8ths is with
a groundplane that extents to infinity.
5/8ths with sloping 5/8th radials are begining to perform more like a
ceterfed collinear.

Jimmie

2038. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 20:34:01 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fe8rfs$7vs$1@news.albasani.net>
Source record: 35720

Ed Cregger wrote:

> ...
> I suggested a simple 1/2 wave J-pole antenna earlier that was easy to
> make, super easy to tune and one that worked very effectively. Yet
> everyone is beating their brains out trying to come up with the best
> 5/8th wave J-pole, even though this design will require lossy matching
> devices to get the impedance down to a manageable/acceptable level.
> What's up wid dat?
> ...
> Ed, NM2K

Until recently, I owned an all fiberglass houseboat--beautiful rig.
However, on fresh water it offered no counterpoise properties whatsoever.

A continuously loaded 1/2 wave end fed vertical utilizing a modified
gamma match feed ended up the solution, and one which required a minimal
counterpoise.

Regards,
JS

2039. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 21:25:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <oeufg3hmnb9es73nndisu53kbjm8v1o8nd@4ax.com>
Source record: 35721

On Sat, 6 Oct 2007 15:45:49 -0400, "Jimmie D"
<GFENDER@carolina.rr.com> wrote:

>>>Please tell me, how is this any more dangerous that troubleshooting
>>>under the chassis of a tube receiver.
>>
>> You are holding one conductor, and standing on the other.
>
>You dont have to do it that way, You are assuming the worst possible
>condition. It can be done safely.

Hi Jimmie,

Sounds like the passionate "Trust me" every teenage boy assures his
date in the back seat. "We can do this safely if I don't...."

With a nearly infinite amount of current behind the fuse (the part of
the wire you are closest too) and standing on an nearly infinite sink
of current; sure you can do it safely IF... (with a chain of
conditions that must be all met, with any one of which that fails
results in death).

You are not going to buy this device off the shelf, certainly no
vendor could afford the liability. You have to expend some effort
(however slight) to build it yourself. It then argues, with the same
effort, why don't you do it right?

An equally (possibly more) accurate method might be as simple as
digging up a spadeful of earth and counting the worms. If you can't
sink the shovel, you already know you have poor earth and you've saved
the cost of a fuse-blower.

73's
Richard Clark, KB7QHC

2040. Re: yaesu FT-817ND without antenna tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 21:33:42 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <r6vfg39dv838hedsop4i8kcq3nqrkrdk8k@4ax.com>
Source record: 35722

On Sat, 06 Oct 2007 15:05:01 -0400, James Barrett <xucaen@comcast.net>
wrote:

>-----BEGIN PGP SIGNED MESSAGE-----
>Hash: SHA1
>
>Hi, I'm a new ham, and I'm looking for my first HF transceiver. I am
>considering the Yaesu FT-817ND. I did some google searches and could not
>find any information about using an antenna tuner with this rig. How can
>it work on all bands without a tuner?

The transceiver's output circuitry makes it work on each of the bands,
1.8 through 440 mhz. An antenna tuner has nothing to do with that.

If you attach a resonant antenna for a particular band, it should work
fine with the transceiver on that band. If the antenna feedline does
present a 50 ohm impedance to the transceiver, you may need an
external antenna tuner.

bob
k5qwg

> Would I need a tuner or does the
>supplied antenna work on all bands without a tuner? I browsed the
>owner's manual on Yaesu's web site as well and didn't see any mention
>about using a tuner. The link to yaesu's page is
>http://www.yaesu.com/indexVS.cfm?cmd=DisplayProducts&ProdCatID=102&encProdID=06014CD0AFA0
702B25B12AB4DC9C0D27&DivisionID=65&isArchived=0
>I read some reviews on eHam too, and it almost sounds like the FT-817ND
>doesn't need a tuner.. I'm confused.
>Any opinions would be helpful.
>
>Thanks!
>Jim
>-----BEGIN PGP SIGNATURE-----
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>
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>=BD4f
>-----END PGP SIGNATURE-----

2041. Re: Antennas guilty of RFI?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 21:38:07 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99C24D9FED8E0nonenowhere@61.9.191.5>
Source record: 35723

Roy Lewallen <w7el@eznec.com> wrote in
news:13gf0g5os1jvm04@corp.supernews.com:

...
> The improvement noted by increasing the distance between the radiating
> conductor and the consumer electronics (or power or other wiring
> they're connected to) can be much greater than an "inverse square law"
> would imply.
>
> That's because a lot of the problems with interference occur in the
> near field of the radiating conductor. In the far field, the field
> strength is inversely proportional to the distance (the power density
> follows the "inverse square law"). But in some parts of the near
> field, the field strength varies as the inverse *cube* of the
> distance. So even a small increase in distance can often have quite a
> dramatic effect on interference level.

Roy,

The NTIA's long awaited second report on BPL has some interesting results of NEC simulations to support the Part 15 distance extrapolation factor of 40dB/decade on slant distance below 30MHz. NTIA have models at a range of frequencies that explore the validity of the above factor, part II which contains the graphs of the simulations makes an interesting read.

It seems to me that the issues to do with field strength vs distance are quite applicable to a ham antenna as the radiator.

The report is at
http://www.ntia.doc.gov/osmhome/reports/2007/bpl2007.html .

Owen

2042. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 22:17:55 UTC
From: "Green Xenon [Radium]" <glucegen1@excite.com>
Message-ID: <47080705$0$24349$4c368faf@roadrunner.com>
Source record: 35724
Cross-posted to: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

On Oct 6, 6:24 am, "George Dishman" <geo...@briar.demon.co.uk> wrote in
http://groups.google.com/group/sci.energy/msg/ad14e4c2d56369db :

> "Green Xenon [Radium]" <gluceg...@excite.com> wrote in
messagenews:47072242$0$15384$4c368faf@roadrunner.com...
> ...

> > ... This receiver also has a robust signal processor
> > that can eliminate clipped-waveforms [such as square waves], spikes,
> > clicks, pops, hiss, and random noise
> > even at those trivial wattage
> > levels. After eliminating those unwanted signals, the carrier wave
> > > is
> > amplified.

> There is no carrier,

Yes there is. Why do you say there isn't? Certain waveforms in the
carrier wave that would cause the modulator signal to contain
clipped-waveforms [such as square waves], spikes, clicks, pops, hiss,
and random noise are removed. However, the remainder of the carrier-wave
remains unscathed.

> it was one of those signals you just
> eliminated.

How so?

> > If I am on this spaceship, what will
> > I most likely hear on the radio?

> Stop trying to troll, you are too stupid to pull it off.

I don't troll or spam. I am asking this question because -- unlikely [if
not impossible] as my 2-GHz-in-outer-space scenario is -- I am still
interested in it.

Now please please please answer my question. What would I hear?

I chose 2 GHz because it is in the UHF band. UHFs tend to be best for
extremely long distance reception. Of the radio waves emitted by objects
trillions of miles -- or more -- away, UHF is usually the most receivable.

2043. Re: yaesu FT-817ND without antenna tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 22:58:16 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99C1A27AD1811HuckleberryREMOVEbig@198.186.192.196>
Source record: 35725

>
> The transceiver's output circuitry makes it work on each of the bands,
> 1.8 through 440 mhz. An antenna tuner has nothing to do with that.
>
> If you attach a resonant antenna for a particular band, it should work
> fine with the transceiver on that band. If the antenna feedline does
> present a 50 ohm impedance to the transceiver, you may need an
> external antenna tuner.
>

Bob,

Before the new ham becomes totally confused, I think your typo above should be corrected.... If the antenna feedline does NOT present a 50 ohm impedance to the xcvr, he may need an external antenna tuner.

Ed K7AAT

2044. Re: yaesu FT-817ND without antenna tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 23:08:55 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <sa5gg3hv82oaeqd6sq221pumo1lq75srev@4ax.com>
Source record: 35726

On 06 Oct 2007 22:58:16 GMT, Ed G <Huckleberry_REMOVE_@bigvalley.net>
wrote:

>
>>
>> The transceiver's output circuitry makes it work on each of the bands,
>> 1.8 through 440 mhz. An antenna tuner has nothing to do with that.
>>
>> If you attach a resonant antenna for a particular band, it should work
>> fine with the transceiver on that band. If the antenna feedline does
>> present a 50 ohm impedance to the transceiver, you may need an
>> external antenna tuner.
>>
>
> Bob,
>
> Before the new ham becomes totally confused, I think your typo above
>should be corrected.... If the antenna feedline does NOT present a 50
>ohm impedance to the xcvr, he may need an external antenna tuner.
>
>
> Ed K7AAT

Yes, thank you :-)

bob
k5qwg

2045. Re: yaesu FT-817ND without antenna tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-06 23:51:07 UTC
From: Anonymous <anyone@no-spam-please.com>
Message-ID: <061020071951071511%anyone@no-spam-please.com>
Source record: 35727

In article <irCdndDMrfKhQZranZ2dnUVZ_rKtnZ2d@comcast.com>, James
Barrett <xucaen@comcast.net> wrote:

> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> Hi, I'm a new ham, and I'm looking for my first HF transceiver. I am
> considering the Yaesu FT-817ND.

I'm a new ham using the FT-817ND. I wish I had gotten a 100-watt rig as
my first transmitter and gotten the low-power 817ND later. I do like
the idea of QRP (low power) operation but it requires patience and some
experience with knowing when the bands are open. Probably not the best
choice for a new ham.

> I did some google searches and could not
> find any information about using an antenna tuner with this rig. How can
> it work on all bands without a tuner?

For the frequencies above 30 MHz you can use the whip antenna that
comes with the 817ND. No tuner will be needed.

For the frequencies below 30 MHz you need some sort of outdoor antenna.
You can find some ready to use antennas at the MFJ Enterprises web site
among many other places. One example of a way to go is this. Get a
simple dipole antenna for the 80 meter band and install it outdoors.
You can use that antenna on the band it's made for without a tuner.

With the help of a tuner (such as the automatic Z-11 Pro by LDG
Electronics) you could also use that antenna on higher frequencies such
as the 40 meter band, the 30 meter band, etc.

sincerely,

anonymous in Florida

--
-30-

2046. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 00:22:07 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13gg9lgtng05p42@corp.supernews.com>
Source record: 35728

Ed Cregger wrote:
>
> Yes, BUT, the 5/8th wave radiator will put more of the signal toward the
> horizon, instead of launching it at a 40 degree plus angle away from the
> horizon. So while one configuration can have higher dbi ratings, it
> doesn't count unless the signal goes where it will be most effective.
> . . .

When mounted on a perfect ground plane of infinite extent, any ground mounted vertical monopole higher than 1/2 wavelength will have one or more high angle lobes. As the height increases above 1/2 wavelength, the gain at the horizon increases even though a high lobe appears at around 60 degrees above the horizon. The gain at the horizon peaks out at about 5/8 wavelength, where the high lobe is about 9 dB weaker than the main lobe. As the antenna gets longer than 5/8 wavelength, the power going into the upper lobe starts reducing the gain at the horizon (and the lobe's elevation angle slowly drops) until at one wavelength, all the power goes to the upper lobe and there's no radiation at the horizon at all.

The gain increase of 1/2 or 5/8 wavelength antennas over shorter monopoles comes about by a narrowing of the lobe pointing toward the horizon. Unfortunately, though, radiation at the low angles is severely attenuated by reflection from real ground. And this is just where most of the power from longer verticals is going. So a 5/8 wave HF vertical usually won't exhibit the gain over a shorter antenna you see with a perfect ground simulation. Likewise, a finite ground plane like a car roof impacts low angle radiation, so it has more of an effect on a 1/2 or 5/8 wave radiator than a shorter one, and once again you often won't see the gain you might expect.

A few minutes with the demo version of EZNEC or a similar program shows the effect of finite ground on various antenna heights very clearly. Use MININEC-type ground to eliminate the separate effect of ground system resistive loss. The full EZNEC program will let you model an antenna on a car top (by using a wire grid to simulate the car top).

Roy Lewallen, W7EL

2047. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 01:10:27 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <470831f5$0$20628$4c368faf@roadrunner.com>
Source record: 35729

>>
>
> Hi Jimmie,
>
> Sounds like the passionate "Trust me" every teenage boy assures his
> date in the back seat. "We can do this safely if I don't...."
>
> With a nearly infinite amount of current behind the fuse (the part of
> the wire you are closest too) and standing on an nearly infinite sink
> of current; sure you can do it safely IF... (with a chain of
> conditions that must be all met, with any one of which that fails
> results in death).
>
> You are not going to buy this device off the shelf, certainly no
> vendor could afford the liability.

Actually you CAN buy it off the shelf. The local power company uses them and they ARE factory made devices.
The biggest difference between theirs and my homebuilt one is theirs is breach loading which gives them the ability to safely change the fuse without unpluging it. I think mine has a better feature, the business end is sheathed and has to be fitted down over the ground connection on theirs where you contact the ground the electrode is EXPOSED. Yeah you might get electrocuted doing something like this, you might get yourself impailed on a groundstake while driving it and you might get in a bad wreck the next time you are out fox hunting. Everything has risk. Knowledge, skill and common sense can mediate a lot of it.

I check the ground on 28 facilities twice a year and the most dangerous part of the job is driving to the facilities.
Now that can be scary.

Jimmie

2048. Re: Ground rod lengths vs number

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 01:29:39 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns99C1DADEACC9Amcoslocomcastnet@216.196.97.136>
Source record: 35730

Richard Clark <kb7qhc@comcast.net> wrote in
news:oeufg3hmnb9es73nndisu53kbjm8v1o8nd@4ax.com:

> On Sat, 6 Oct 2007 15:45:49 -0400, "Jimmie D"
> <GFENDER@carolina.rr.com> wrote:
>
>>>>Please tell me, how is this any more dangerous that troubleshooting
>>>>under the chassis of a tube receiver.
>>>
>>> You are holding one conductor, and standing on the other.
>>
>>You dont have to do it that way, You are assuming the worst possible
>>condition. It can be done safely.
>
> Hi Jimmie,
>
> Sounds like the passionate "Trust me" every teenage boy assures his
> date in the back seat. "We can do this safely if I don't...."
>
> With a nearly infinite amount of current behind the fuse (the part of
> the wire you are closest too) and standing on an nearly infinite sink
> of current; sure you can do it safely IF... (with a chain of
> conditions that must be all met, with any one of which that fails
> results in death).

Wouldn't you have about the amount of current that the mains is
breakered for - yaeh, I know nit-picking...

> You are not going to buy this device off the shelf, certainly no
> vendor could afford the liability. You have to expend some effort
> (however slight) to build it yourself. It then argues, with the same
> effort, why don't you do it right?

Not entirely. Goalie equipment is still sold, and people like me can send
a puck at them approaching 100 mph. Liability is a big part of the price.
Similar to climbing harnesses. Or tube equipment for that matter.

> An equally (possibly more) accurate method might be as simple as
> digging up a spadeful of earth and counting the worms. If you can't
> sink the shovel, you already know you have poor earth and you've saved
> the cost of a fuse-blower.

I dunno, it doesn't seem like that bad of a solution to me. But then
again, I dig my radial trenches with a chain saw. 8^)

- 73 de Mike KB3EIA -

2049. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 02:23:02 UTC
From: Danny Richardson <>
Message-ID: <34ggg3hd0kb98jn62rgl17gubmhemcfd5l@4ax.com>
Source record: 35731

On Sat, 06 Oct 2007 17:22:07 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>The gain increase of 1/2 or 5/8 wavelength antennas over shorter
>monopoles comes about by a narrowing of the lobe pointing toward the
>horizon. Unfortunately, though, radiation at the low angles is severely
>attenuated by reflection from real ground. And this is just where most
>of the power from longer verticals is going. So a 5/8 wave HF vertical
>usually won't exhibit the gain over a shorter antenna you see with a
>perfect ground simulation. Likewise, a finite ground plane like a car
>roof impacts low angle radiation, so it has more of an effect on a 1/2
>or 5/8 wave radiator than a shorter one, and once again you often won't
>see the gain you might expect.
>
>A few minutes with the demo version of EZNEC or a similar program shows
>the effect of finite ground on various antenna heights very clearly. Use
>MININEC-type ground to eliminate the separate effect of ground system
>resistive loss. The full EZNEC program will let you model an antenna on
>a car top (by using a wire grid to simulate the car top).

It more that just the car's roof that impacts the antennas' radiation
patterns. The car's whole body has a significant effect and there will
be variations - sometimes large - between different vehicles.

http://k6mhe.com/files/mobile_vhf_ant.pdf

Danny, K6MHE

2050. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 03:40:19 UTC
From: Mas Plak <nospam@nospam.com>
Message-ID: <4708551a$0$47117$892e7fe2@authen.yellow.readfreenews.net>
Source record: 35732
Cross-posted to: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

"Green Xenon [Radium]" <glucegen1@excite.com> wrote in message
news:47072242$0$15384$4c368faf@roadrunner.com...
> Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> Content-Transfer-Encoding: 7bit
>
> Hi:
>
> Let's say I am in a space station which has a 2 GHz DX AM analog
> receiver that receives the magnetic fields [while ignoring the electric
> fields]

WRONG. it is therefore not an EM wave, and your receiver will not pick it
up.

> of extremely weak 2 GHz AM analog carrier signals. In addition,
> this receiver is so sensitive and powerful that it can clearly pick up
> AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000
> watt-per-meter-squared.

Powerful is the wrong word.

What type of "selectiveity" does it have?? (moron)

> This receiver also has a robust signal processor
> that can eliminate clipped-waveforms [such as square waves], spikes,
> clicks, pops, hiss, and random noise

It can not eliminate random noise, idiot stufinagle.

>even at those trivial wattage
> levels. After eliminating those unwanted signals,

snip rest of trivial drivialings

2051. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 05:31:48 UTC
From: nm5k@wt.net
Message-ID: <1191735108.746646.170820@22g2000hsm.googlegroups.com>
Source record: 35733

On Oct 6, 3:19 pm, "Jimmie D" <GFEN...@carolina.rr.com> wrote:

> If I remember correctly the oft quoted theorotical gain of a 5/8ths is with
> a groundplane that extents to infinity.
> 5/8ths with sloping 5/8th radials are begining to perform more like a
> ceterfed collinear.
>
> Jimmie

Exactly. That is what you want. A 5/8 element is only half an
antenna,
and the other half wants to be a 5/8 too to work properly. All a 5/8
GP
is , is half of an EDZ. You would never want to run only half of an
EDZ,
or use a 1/4 wave leg on one side, etc.. Like I say, it's a
perversion.
The 1/2 wave is the only single element that can be a proper complete
antenna on it's own. Or according to the laws of NM5K anyway... :/
And of course, even that "complete" antenna needs decoupling from
the feedline to live up to it's full potential.
The success of a 5/8 antenna varies a lot across the spectrum.
On 2m, I hate em... Not a good pattern for VHF, unless you use the
collinears, etc..
But... On 10m, it's my favorite vertical.. I've done careful tests
over
the years, and I've never had any other type single element beat it.
But... I was using 3/4 wave radials the last time I did do testing
on all those.
In one test, I started with a 1/4 wave GP with sloping radials.
Worked ok..
Then I built a 1/2 wave whip, and fed as a ringo.
I saw an improvement over the 1/4 GP, even with no decoupling.
So, I then decided to add a decoupling section, using a 1/4 wave
section of the feedline below the feed, and attached to a set of
1/4 radials.
This improved the antenna a good bit. It was really humming
along at that point. I used mainly stable local signals to test
any improvements. When I added the decoupling to the halfwave,
I noticed a bit less bandwidth as far as the antenna, but the
performance was more stable, and I assume would be about the
same no matter what line length I used, etc..
Anyway, I had the half wave working about as well as possible I
think.

Then I built a 5/8 radiator, and used 4 sloping 3/4 wave radials.
Guess what? It beat the decoupled half wave by an easily noticed
margin on the low angle space/ground wave paths I was using to
test. The other stations were spread across town in various
locations, some 30-40 miles away.
If the low angle performance of the 5/8 was crippled, I sure
didn't see it here on 10m. It still had enough gain at low angles
to beat anything else I could try.
BTW, all those antennas were mounted at the same 36 ft height.
I also ran a 5/8 GP on 17m for a while. That antenna beat every
other antenna I had that could be tuned for 17m. IE: wire
dipoles, etc..
I've seen a load of people use the usual "perverted" 5/8 GP
on the CB band. Even with the short 1/4 radials, I never saw
one of those lose to a 1/4 wave GP. On the average CB meter, '
the change from a 1/4 GP to the 5/8 GP was normally good
for about 2 S units on the average CB , if you were talking
across town a ways. I've seen this too many times for it to
be a fluke of nature. This goes back to the early 70's..
Anyway, I like 5/8 verticals on the HF bands. But myself,
I don't use the short 1/4 wave radials.
As far as 5/8 whips on cars, just depends on the path.
Here in Houston, with the flat terrain, a 5/8 will generally
beat a 1/4 wave by a noticable amount, and will usually
have less picket fencing.
But in those cases, the metal under the antenna is fairly
large vs wavelength. IE: a 5/8 at 146 mhz is about 48 inches.
So it doesn't take a huge vehicle to give a decent ground
plane if the antenna is on the roof or trunk.
Myself, I think most mobile 5/8 whips work better than
elevated 5/8 GP's used on the same band.
In some areas, the terrain will favor using the 1/4 wave
though.
Like I say, the usual 5/8 with 1/4 wave straight radials
is generally the pits on 2m, unless some strange quiver
in the force kicks in, like say in phase feedline currents,
etc. And thats fairly rare in the real world. It can happen
though..
A properly decoupled dual 5/8 collinear on 2m is a stout
antenna and will be hard to beat unless you take drastic
measures. Once I get to that point, I switch to a yagi if
I want to do better. A 3 el yagi will pretty much smoke
any practical vertical.
Anyway, the performance of 5/8 antennas varies quite
a bit depending on where you are using them at.
The 5/8 with 3/4 radials I used on 10m was pretty
stout overall. It was the best out of all the usual
lengths.
The real world and the modeling programs don't always
exactly jive..

IE: On Cevics page, he mentions that in his modeling
tests, he seems to think the 5/8 GP was generally
not worth the trouble on the upper HF bands.. IE: 10m
I know from real world use, it is worth it. No doubt
in my mind. But I also know there are much better
radial lengths than the straight 1/4 wave.
BTW, I agree with one thing he mentioned..
Sloping 1/4 radials with the 5/8 is the pits... You want
1/4 wave radials straight out if they are under a 5/8
whip. Sloping them will really whack out the pattern.
But sloping radials are no problem under a 1/4 wave
whip. Now, on the other hand, sloping 3/4 or 5/8
radials under a 5/8 whip are ok.
MK

2052. Seeking New FAQ/Intro Maintainers for rec.radio.amateur.*

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 06:05:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/recruitment-1-1191737101@panix.com>
Source record: 35734
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/recruitment
Revision: 1.1 2007/09/29 18:42:47
Posting-Frequency: posted monthly
URL: http://www.faqs.org/faqs/radio/personal-intro/

Changes followed by "|".

The rec.radio.info newsgroup, first established in 1993, has been
recently revived by an active moderation team. We are currently seeking
suitable information, FAQ, and bulletin articles from the entire
rec.radio.* newsgroup hierarchy for simultaneous cross-posting to our
newsgroup.

We are seeking a replacement maintainer for the following information
bulletin formerly posted to rec.radio.amateur.* (and currently archived
at http://www.faqs.org/faqs/radio/personal-intro/ ):

radio/personal-intro
Subject: Guide to the rec.radio Newsgroups
Maintainer: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Last Posted: 9 Nov 2001 06:18:17 GMT
Posting-Frequency: 15th of each month

We are willing to provide any technical support necessary to get this
article updated and automatically posted again at a regular interval.
This would include establishing contact with the original maintainer for
any necessary permissions. We would prefer to seek a new, dedicated
maintainer at this time, rather than start auto-posting the original
article ourselves.

For more information about our newsgroup, see:

http://www.panix.com/~rram/usenet/rri/index.html

Please direct any comments, questions, or criticisms to
rec-radio-info-request@panix.com.
```

2053. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 06:07:17 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <47087787$0$18910$4c368faf@roadrunner.com>
Source record: 35735

> > BTW, I agree with one thing he mentioned..
> Sloping 1/4 radials with the 5/8 is the pits... You want
> 1/4 wave radials straight out if they are under a 5/8
> whip. Sloping them will really whack out the pattern.
> But sloping radials are no problem under a 1/4 wave
> whip. Now, on the other hand, sloping 3/4 or 5/8
> radials under a 5/8 whip are ok.
> MK
>
>

A few years ago I bought a commercial 5/8ths with sloping 1/4 wl radials, It was worse than the homemade 1/4wl groundplane it replaced.

Jimmie

2054. Re: yaesu FT-817ND without antenna tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 06:14:03 UTC
From: gsm@mendelson.com
Message-ID: <slrnfggu0v.ks1.gsm@cable.mendelson.com>
Source record: 35736

Anonymous wrote:

> I'm a new ham using the FT-817ND. I wish I had gotten a 100-watt rig as
> my first transmitter and gotten the low-power 817ND later. I do like
> the idea of QRP (low power) operation but it requires patience and some
> experience with knowing when the bands are open. Probably not the best
> choice for a new ham.

As someone who is on the other end of the signal path, I can tell
you that 100 watts is not going to make much of a difference if the
band is not "open".

Your signal would be stronger and the two "S units" or so may bring it
above the noise (or not), but if I can't hear you at all, 5 watts,
100 watts, 1000 watts, or even 100,000 watts is not going to make
your signal show up somewhere there is no propigation to.

It WILL help for crowded bands, where hearing your signal a little louder
than the others, or at least not being lost in a pile-up, but that comes
back to skill and patience.

Timing is also critical, when I can hear U.S. stations it's around sunrise
and sunset here. Sunrise is when most U.S. hams are asleep (around 11pm-1am
EST) and just getting to work when the sun sets. You also can't guess it
by looking out the window, since I'm closer to the equator, days are
shorter in the summer and longer in the winter.

I know the bands do open, on contest weekends, they suddenly "come alive".

The other problem is the bands themselves. Our 80m band goes to 3850 and while
legally 40m now goes to 7200, in practice, it stops at 7100 where the zillion
watt SWBC stations make ham communications impossible.

Quite simply, you can call "CQ DX" on 75m or 40m and no one this side of the
world will hear you and if we do and reply, you won't hear us unless you are
listening where we may transmit.

So skill, patience, and timing are as important as the bands being open,
and IMHO more important than how much power you use.

You will also find that if you tell people you are QRP, they often make
things easier for you, such as "CQ DX CQ DX DE (or "this is" for voice)
<callsign> QRP". Repeat your callsign several times slowly and
phoneticaly for voice and for CW don't call CQ faster than you the
slowest speed you want to copy.

You also should LISTEN for a while so you understand what the other operator
wants. If you want quick contacts for points or QSL cards, don't answer a CQ

or call someone who likes to chat and vice versa.

Since this is an antenna group, having a good low noise antenna in a low noise location helps. If all you hear is S9+ noise, you won't make many contacts.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

2055. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 06:48:12 UTC
From: nm5k@wt.net
Message-ID: <1191739692.978819.145730@g4g2000hsf.googlegroups.com>
Source record: 35738

On Oct 7, 12:31 am, n...@wt.net wrote:

> IE: On Cevics page,

I noticed that should be Cebik... Had a mental
vapor lock on the name I guess.. :/
MK

2056. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 06:54:09 UTC
From: "Green Xenon [Radium]" <glucegen1@excite.com>
Message-ID: <47088001$0$9605$4c368faf@roadrunner.com>
Source record: 35737
Cross-posted to: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

Mas Plak wrote:

> "Green Xenon [Radium]" <glucegen1@excite.com> wrote in message
> news:47072242$0$15384$4c368faf@roadrunner.com...

>>Content-Type: text/plain; charset=ISO-8859-1; format=flowed
>>Content-Transfer-Encoding: 7bit
>>
>>Hi:
>>
>>Let's say I am in a space station which has a 2 GHz DX AM analog
>>receiver that receives the magnetic fields [while ignoring the electric
>>fields]

> WRONG. it is therefore not an EM wave, and your receiver will not pick it
> up.

An EM wave has an electric component and a magnetic component. The
antenna determines whether you are interacting with the electric portion
of the field or the magnetic. A shielded loop will receive the magnetic
portion of the field and ignore the electric if properly constructed.

>>of extremely weak 2 GHz AM analog carrier signals. In addition,
>>this receiver is so sensitive and powerful that it can clearly pick up
>>AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000
>>watt-per-meter-squared.

> Powerful is the wrong word.

Then what is the correct word? "Sensitivity"?

> What type of "selectiveity" does it have??

What do you mean by "selectivity"?

>> This receiver also has a robust signal processor
>>that can eliminate clipped-waveforms [such as square waves], spikes,
>>clicks, pops, hiss, and random noise

> It can not eliminate random noise

How about in the mysterious too-good-to-be-true situation that it can?
Then what would happen?

I used to often play my Nintendo when it was connected to channel 3.
However, I was change the TV channel to 4. I could see the video of the

game but it was fuzzy and covered in grains. The music of the game was absent, and instead was filled with frightening-yet-enjoyable tones [sounding like a buzzer, lawn mower, or electric shaver] along with a faint audio of what was being discussed on the channel 4 news.

Is there a good chance I would hear something similar on my 2 GHz AM DX receiver in space?

Also, whenever there is drill or an actually emergency, the Emergency Alert System [EAS] plays their music. First they play the boring low-pitch square-wave tones. Then they play the high-pitched, terrifying, psychedelic sine-wave tones.

Is there a good chance I would hear something similar to the second higher-pitched set of EAS tones on my 2 GHz AM DX receiver in space?

2057. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 09:31:32 UTC
From: oriel36 <geraldkelleher@yahoo.com>
Message-ID: <1191749492.702997.254880@o3g2000hsb.googlegroups.com>
Source record: 35739
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

On Oct 7, 8:54 am, "Green Xenon [Radium]" <gluceg...@excite.com>
wrote:
> Mas Plak wrote:
> > "Green Xenon [Radium]" <gluceg...@excite.com> wrote in message
> >news:47072242$0$15384$4c368faf@roadrunner.com...
> >>Content-Type: text/plain; charset=ISO-8859-1; format=flowed
> >>Content-Transfer-Encoding: 7bit
>
> >>Hi:
>
> >>Let's say I am in a space station which has a 2 GHz DX AM analog
> >>receiver that receives the magnetic fields [while ignoring the electric
> >>fields]
> > WRONG. it is therefore not an EM wave, and your receiver will not pick it
> > up.
>
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> antenna determines whether you are interacting with the electric portion
> of the field or the magnetic. A shielded loop will receive the magnetic
> portion of the field and ignore the electric if properly constructed.
>
> >>of extremely weak 2 GHz AM analog carrier signals. In addition,
> >>this receiver is so sensitive and powerful that it can clearly pick up
> >>AM carrier waves as weak as 10-to-the-power-NEGATIVE-10,000
> >>watt-per-meter-squared.
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>
> Then what is the correct word? "Sensitivity"?
>
> > What type of "selectiveity" does it have??
>
> What do you mean by "selectivity"?
>
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> >>that can eliminate clipped-waveforms [such as square waves], spikes,
> >>clicks, pops, hiss, and random noise
> > It can not eliminate random noise
>
> How about in the mysterious too-good-to-be-true situation that it can?
> Then what would happen?
>
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> However, I was change the TV channel to 4. I could see the video of the

> game but it was fuzzy and covered in grains. The music of the game was
> absent, and instead was filled with frightening-yet-enjoyable tones
> [sounding like a buzzer, lawn mower, or electric shaver] along with a
> faint audio of what was being discussed on the channel 4 news.
>
> Is there a good chance I would hear something similar on my 2 GHz AM DX
> receiver in space?
>
> Also, whenever there is drill or an actually emergency, the Emergency
> Alert System [EAS] plays their music. First they play the boring
> low-pitch square-wave tones. Then they play the high-pitched,
> terrifying, psychedelic sine-wave tones.
>
> Is there a good chance I would hear something similar to the second
> higher-pitched set of EAS tones on my 2 GHz AM DX receiver in space?

Let me put you out of your misery,I do not know how old you are but
you unwittingly introduce a big no-no by postulating EM waves in space
and that implies a medium.

This is fine,they were faced with a dilemma in the mid19th century
inherited from Newton where they could live happily with the the Sun
influencing the Earth without a medium but could not conceive the Sun
illuminating the Earth without one.Check the top right column of the
following article from 1843 to affirm this -

http://www.bodley.ox.ac.uk/cgi-bin/ilej/image1.pl?item=page&seq=9&size=1&id=bm.1843.10.x.54.336.x.425

50 years later they dumped a medium on Newton anyway as 'absolute
space' and then conveniently rejected it all over again and then you
have 100 years of relativistic junk,some hopeless cases still think it
is an achievement but they are the ones who jump in here and try to
make you look like an idiot even though it may be a fair question.

2058. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 11:43:26 UTC
From: George Dishman <george@briar.demon.co.uk>
Message-ID: <bJqdnYvoXp2LWJXanZ2dnUVZ8t-nnZ2d@pipex.net>
Source record: 35740
Cross-posted to: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

"Green Xenon [Radium]" <glucegen1@excite.com> wrote in message
news:47080705$0$24349$4c368faf@roadrunner.com...
> On Oct 6, 6:24 am, "George Dishman" <geo...@briar.demon.co.uk> wrote in
> http://groups.google.com/group/sci.energy/msg/ad14e4c2d56369db :
>
> > "Green Xenon [Radium]" <gluceg...@excite.com> wrote in
> messagenews:47072242$0$15384$4c368faf@roadrunner.com...
> > ...
>
>
> > > ... This receiver also has a robust signal processor
> > > that can eliminate clipped-waveforms [such as square waves], spikes,
> > > clicks, pops, hiss, and random noise
> > > even at those trivial wattage
> > > levels. After eliminating those unwanted signals, the carrier wave
> > > > is
> > > amplified.
>
> > There is no carrier,
>
> Yes there is. Why do you say there isn't?

Because a sine wave is a sine and you cannot
distiguish one from another. There is no
criterion that says anything is a "carrier"
and not just part of the background hiss.

> > it was one of those signals you just
> > eliminated.
>
> How so?

If you use a band pass filter at some frequency
that you guess could be a carrier followed by an
envelope detector, you get hiss. To eliminate
the hiss, you have to eliminate all other
frequencies so all you are left with is CW and
the envelope detector then gives a DC output.

> > > If I am on this spaceship, what will
> > > I most likely hear on the radio?
>
> > Stop trying to troll, you are too stupid to pull it off.
>

> I don't troll or spam. I am asking this question because -- unlikely [if
> not impossible] as my 2-GHz-in-outer-space scenario is -- I am still
> interested in it.
>
> Now please please please answer my question. What would I hear?

Several people have answered you already, the
answer is silence.

George

p.s this time I won't forget to do the <plonk> :(
Don't expect any more replies, I don't respond to
spammers and your drivel is off-topic in virtually
every group you have posted to.

2059. Re: yaesu FT-817ND without antenna tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 13:36:13 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <ev3nt4-scp.ln1@p400bob.personal.cox.net>
Source record: 35792

Hi Jim

I haven't seen a simple answer to your question yet!

- I can see nothing in URL you sent to indicate that the radio has an internal antenna tuner. ATU's running to coaxial (SO239/M) connectors can be horribly lossy as well. (Or at least in the coax run from it to the antenna) If it had a tuner as a "feature" it would say so to enhance the products capabilities.

- If the antenna you are using presents a suitable load to the radio then you don't need a standalone tuner. I don't actually run a tuner, having built antennas that cover my bands of interest.

- If you want to have (say) just one simple antenna up, yes you'll need a tuner with this radio (or some other method to match things. Lots of possibilities to research here!)

- Keep in mind that with such a low output power the voltage handling specs of you tuning components are much lower. Very easy to throw one together with junk box parts.

Cheers Bob VK2YQA

James Barrett wrote:
>
> Hi, I'm a new ham, and I'm looking for my first HF transceiver. I am
> considering the Yaesu FT-817ND.

2060. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 13:46:07 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <zq5Oi.5052$4V6.3419@newssvr14.news.prodigy.net>
Source record: 35791
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

oriel36 wrote:
> 50 years later they dumped a medium on Newton anyway as 'absolute
> space' and then conveniently rejected it all over again and then you
> have 100 years of relativistic junk,some hopeless cases still think it
> is an achievement but they are the ones who jump in here and try to
> make you look like an idiot even though it may be a fair question.

They were only confused about the nature of the "ether".
Now we know that empty space is indeed not empty and
is something (as opposed to absolute nothing) that some
physicists describe as a "quantum soup" outside of which
EM waves cannot propagate.
--
73, Cecil http://www.w5dxp.com

2061. Re: yaesu FT-817ND without antenna tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 14:36:32 UTC
From: James Barrett <xucaen@comcast.net>
Message-ID: <_MydnRPmH-8rcJXanZ2dnUVZ_r6rnZ2d@comcast.com>
Source record: 35793

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Bob Bob wrote:
> Hi Jim
>
> I haven't seen a simple answer to your question yet!
>

I don't mind all the different answers. It actually helps me to figure out what it's all about.

I think my first misunderstanding about the Yaesu was that in reading the owner's manual, I had been expecting it to have a built-in automatic tuner (the Icom 703+ has one). When I read about the VHF antenna which comes with the radio it made it seem like I could use it on all bands.. of course I misunderstood what I was reading. I understand now that it does not have a built in tuner, and I would either have to use an external tuner or use a resonant antenna for whichever band I was going to use.

At any rate, if I go with the Yaesu, one benefit would be that I would gain experience in building and tuning my own antennas. That is something I am interested in. Having an automatic tuner might make me lazy. ;-)

I'm not worried about the low power either. I think having a high powered radio for my first rig would make me lazy. It would be easier for me to pump out wattage rather than fine tune my antenna. Besides that, when I am ready for higher power, I could add an amplifier. One thing at a time. ;-)

Jim

-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.4.6 (GNU/Linux)

iD8DBQFHCO7wQuDJiZ/QrH0RAjcNAJ0etx9PNmIN3CW7I/oVQSzIKKgRUgCeIMTm
ZKZCaUZJ2fbyliCeuMmHlFE=
=oTUH
-----END PGP SIGNATURE-----

2062. High voltage and coupling from a vertical to adjacent coax

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 15:08:45 UTC
From: TF3KX <kristinn1@gmail.com>
Message-ID: <1191769725.761279.252680@50g2000hsm.googlegroups.com>
Source record: 35794

I am working on a topband vertical, approx. 12m/36ft tall, with four top hat wires sloping downwards, approx. 6m/18ft long each. Just about midway up this vertical I am contemplating mounting a dipole for the higher frequency bands, and running a coax from this dipole down along the vertical.

Now, I am worried about the interaction between the vertical antenna and this dipole coax. If I feed the vertical through an inductor at the base I presume there will be fairly high voltages on the entire vertical (I may run power up to a KW) and this may couple RF into the dipole coax, which in turn will give me RF where it ends, in the shack.

So, I would like your comments on:

a) Am I correct that there will be high RF voltages along the entire vertical, all the way from the "top end" of the base inductor?
b) What effects will these voltages have on the coax that runs along the vertical? High degree of RF coupling into the coax?
c) Would any kind of choke or filtering on the coax, on its way from the vertical into the shack, be efficient in removing this common-mode RF?
d) What if I move the inductor up the vertical, above the dipole? In that case all the high voltage will be above the dipole and instead I would have low voltage / high current below that inductor. Less coupling there?

Any comments would be appreciated.

73 - Kristinn, TF3KX

2063. Re: yaesu FT-817ND without antenna tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 15:18:23 UTC
From: James Barrett <xucaen@comcast.net>
Message-ID: <HsydneWDr6seapXanZ2dnUVZ_uOmnZ2d@comcast.com>
Source record: 35795

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

I just found this on the yaesu web site. They offer an antenna called
the ATAS-25. It appears to be an antenna that you can easily tune. The
instructions say to use the SWR meter (I think it has one built in) in
CW mode to test the antenna, and make adjustments to it as needed.

Jim
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.4.6 (GNU/Linux)

iD8DBQFHCPi/QuDJiZ/QrH0RAqB1AJ9+9Gdg1YC1QqDauknncEzj+2HPUQCgrmpB
B1oaucpbFeMy/iuBJJIgW/s=
=k++R
-----END PGP SIGNATURE-----
```

2064. Re: yaesu FT-817ND without antenna tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 15:24:02 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <SbqdnbXJq82NZ5XanZ2dnUVZ_rGrnZ2d@comcast.com>
Source record: 35796

"James Barrett" <xucaen@comcast.net> wrote in message
news:_MydnRPmH-8rcJXanZ2dnUVZ_r6rnZ2d@comcast.com...
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> Bob Bob wrote:
>> Hi Jim
>>
>> I haven't seen a simple answer to your question yet!
>>
>
> I don't mind all the different answers. It actually helps me to figure
> out what it's all about.
>
> I think my first misunderstanding about the Yaesu was that in reading
> the owner's manual, I had been expecting it to have a built-in automatic
> tuner (the Icom 703+ has one). When I read about the VHF antenna which
> comes with the radio it made it seem like I could use it on all bands..
> of course I misunderstood what I was reading. I understand now that it
> does not have a built in tuner, and I would either have to use an
> external tuner or use a resonant antenna for whichever band I was going
> to use.
>
> At any rate, if I go with the Yaesu, one benefit would be that I would
> gain experience in building and tuning my own antennas. That is
> something I am interested in. Having an automatic tuner might make me
> lazy. ;-)

There is nothing to keep you from doing this with any radio.

>
> I'm not worried about the low power either. I think having a high
> powered radio for my first rig would make me lazy. It would be easier
> for me to pump out wattage rather than fine tune my antenna. Besides
> that, when I am ready for higher power, I could add an amplifier. One
> thing at a time. ;-)

Unless you have experience with QRP, you might find this an exercise in
frustration. If you don't want to spend the money now, I would look for a
deal on a used 100W rig. There is not much to choose from in amplifiers
(other than VHF/UHF) that don't require 100W of drive.

Tam/WB2TT

>
>

> Jim
>
> -----BEGIN PGP SIGNATURE-----
> Version: GnuPG v1.4.6 (GNU/Linux)
>
> iD8DBQFHCO7wQuDJiZ/QrH0RAjcNAJ0etx9PNmIN3CW7I/oVQSzIKKgRUgCeIMTm
> ZKZCaUZJ2fbyliCeuMmHlFE=
> =oTUH
> -----END PGP SIGNATURE-----

2065. Re: High voltage and coupling from a vertical to adjacent coax

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 15:52:34 UTC
From: Dave <noone@nowhere.com>
Message-ID: <6h7Oi.610$yJ2.454@trndny01>
Source record: 35797

yes to all your suspected problems. high voltages may arc over the
insulation of the coax, there will be very high induced currents on the
shield and the dipole, and in general it will be a mess. the worst part is
one you seem to have missed, with the coax running along side the vertical
it will be essentially like running a ground wire very close to the vertical
and will change it's impedance and likely cause all sorts of grief with it.

"TF3KX" <kristinn1@gmail.com> wrote in message
news:1191769725.761279.252680@50g2000hsm.googlegroups.com...
>I am working on a topband vertical, approx. 12m/36ft tall, with four
> top hat wires sloping downwards, approx. 6m/18ft long each. Just
> about midway up this vertical I am contemplating mounting a dipole for
> the higher frequency bands, and running a coax from this dipole down
> along the vertical.
>
> Now, I am worried about the interaction between the vertical antenna
> and this dipole coax. If I feed the vertical through an inductor at
> the base I presume there will be fairly high voltages on the entire
> vertical (I may run power up to a KW) and this may couple RF into the
> dipole coax, which in turn will give me RF where it ends, in the
> shack.
>
> So, I would like your comments on:
>
> a) Am I correct that there will be high RF voltages along the entire
> vertical, all the way from the "top end" of the base inductor?
> b) What effects will these voltages have on the coax that runs along
> the vertical? High degree of RF coupling into the coax?
> c) Would any kind of choke or filtering on the coax, on its way from
> the vertical into the shack, be efficient in removing this common-mode
> RF?
> d) What if I move the inductor up the vertical, above the dipole? In
> that case all the high voltage will be above the dipole and instead I
> would have low voltage / high current below that inductor. Less
> coupling there?
>
> Any comments would be appreciated.
>
> 73 - Kristinn, TF3KX
>

2066. Re: The varmints [not the dog] chewed my ladderline!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 16:10:54 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1191773454.770187.29350@57g2000hsv.googlegroups.com>
Source record: 35798

On Oct 6, 11:14 am, Walter Maxwell <w...@w2du.com> wrote:
> On Sat, 06 Oct 2007 14:26:48 GMT, "Dave" <no...@nowhere.com> wrote:
>
> >"Joaquin Tall" <opalockamisha...@netscape.net> wrote in message
> >news:FYednUsI6_ONa5vanZ2dnUVZ_vOlnZ2d@nethere.com...
> >> Hello All,
>
> >> Brisk winds blew through our area yesterday and, unfortunately, my 200'
> >> G5RV's feedline touched ground overnight.
>
> >> This morning I noticed that there were chew marks over 40' of the
> >> ladderline; most went deep enough to expose the copper wire underneath. We
> >> live in the country...
>
> >> I called the manufacturer; they told me that "splicing/soldering" in a 40'
> >> length of 300 ohm line to replace the chewed up line would upset the SWR
> >> and almost make the antenna useless. It's the solder joints [no matter how
> >> small] that would mess things up.
>
> That mfgr is not just blowing smoke, he's making an erroneous statement , hoping you'll
bite and buy some more
> of his product, and at the same time starting another myth that we don't need.
>
> If you're using 300-ohm line I assume you're also using an antenna tuner to match the
line to the transmitter.
> If this is the case then the line impedance is immaterial, because you could remove the
chewed-up portion and
> replace it with 450-ohm or 600-ohm line, or whatever impedance line, and adjusting the
tuner for an input of
> 50 ohms will have compensated for the different line impedances along the way. The only
result from using
> different line impedances is that the SWR will be different on the line sections having
the different
> characteristic impedances.
>
> The length of 450-ohm line I had available wouldn't reach from the tuner to the terminals
of my 80-meter
> dipole, but I had a lot of 300-ohm line. So I just used the 300-ohm line to make up the
shortfall in the
> 450-ohm line. Works just fine. Yours will too.
>
> Walt, W2DU- Hide quoted text -
>
> - Show quoted text -

Just take some Acrylic Latex Exterior paint (color of your choice) and paint the area that is chewed... It will work fine forever..

Walt, are you getting my emails?

2067. (WWW.CNCIRCLE.COM)wholesale nike shoes,hoodies, jeans cheaper price (us dollar)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 17:12:46 UTC
From: hy <huangcba@gmail.com>
Message-ID: <1191777166.128086.51510@g4g2000hsf.googlegroups.com>
Source record: 35800

（ www.cncircle.com ）wholesale hip hop clothes Ralph Lauren
Polo,Abercrombie &
Fitch,Juicy Couture
Louis Vuitton,Coogi Red Monkey Evisu Bapes Bathing Ape Lrg CLH Jeans
Shorts Hoodies Shoes Sneakers T Shirts Wholesale Urban Apparel
China:Bape hoody,L.R.G,BBC(Billionaire Boys Club),10 deep,evisu,red
monkey, New arrivals: CLH hoodies and True religion jeans,hot selling
now ed hardy hoodies rocawear coogi Artful DoDger ny CLH 5ive jungle
hoodies ak 999 hoodies.Jacket Evisu Adicolor armani bape bbc North
face hip hop Fashion Trends,Sneakers Creating Limitless Heights
Hoody,CLH Hoodies Shoes Jeans Hats&Belts Gino Green CLH LRG - Artful
Dodger 10 Deep Hoodies Jeans Hats &Belts Gino Green CLH LRG Artful
Dodger 10 Deep Hoodies coogi T-Shirts Red Monkey Evisu Hoodies CLH
Hoodies Ed Hardy Jeans Rolex Watches bape watches D&G Jeans artiful
doger hoodies ... CLH Hoodies coach handbags D&G prada gucci
sneakers.
Our website: www.cncircle.com and http://twwtcl123321.photo.163.com
（ www.cncircle.com ）are china Sneakers Trainers Wholesale Nike
Shoes
Outlet.Wholesale Cheap
Jordan Shoes,Michael Jordan Shoes,Nike Jordan Basketball shoes, ...
Jordan Shoes,Air Jordan Sneakers,Air Jordan Wholesale All of the Air
Jordan sneakers have Nike Air in the shoes.Authentic quality Jordan
Sneakers Custom Jordan Sneakers Wholesale Jordan Sneakers gucci
sneakers prada sneakers,lv chanel coach dior DG
DSQUARED2,Sbikkembe,DIESEL,miumiu handbags sneakers,shoes,gino green
global t-shirts,jeans,jackets.nikes4wholesale.com sale new Nike
Sneakers,Air Jordan
Sneakers,AIR FORCE 1S,Nike Dunks SB,Bape Sta from nike outlets and
factory stores,also Nike wholesale-Jordan Shoes,sneakers!
1.（ （ www.cncircle.com ））Nike Air Max 90 91 95 97 2003 2004 2005
2006 360 2007 Ltd|Nike Air
Max Tn 2 3 4 6 Sneakers Supplier Trainers Wholesale Shop Catalogs
Men's Women's Shoes Customize.（ www.cncircle.com ））
2.（ （ www.cncircle.com ））Nike Shox NZ R4 OZ Bmw Elite Monster VC
Shox TL 2 3 Ride Rival
Energia R5 LV TL 3 Turbo Classic Shoes dendara Supply Sale Store
Distributor Manufacturer Running Shoes Mens Womens Shoes Wholesaler.
（（ www.cncircle.com ））
3.（ （ www.cncircle.com ））Nike Air Jordan 1 2 3 4 5 6 7 8 9 10 11 12
13 14 15 16 17 18 19 20
21 22|Air Jordan Retro I II III IV V VI VII VIII IX X XI XII XIII XIV

XV XVI XVII XVIII XIX XX XXI Sneaker Seller Trainer Suppliers
Collection Chaussure Catalog Customized.((www.cncircle.com))

2068. Re: yaesu FT-817ND without antenna tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 17:12:51 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <9d4ig3pl39fo17jo1snomqsr6mu7ssslqh@4ax.com>
Source record: 35799

On Sun, 07 Oct 2007 10:36:32 -0400, James Barrett <xucaen@comcast.net>
wrote:

>
>I'm not worried about the low power either. I think having a high
>powered radio for my first rig would make me lazy. It would be easier
>for me to pump out wattage rather than fine tune my antenna. Besides
>that, when I am ready for higher power, I could add an amplifier. One
>thing at a time. ;-)

Most of the current solid state 100 watt HF rigs have a menu
adjustment that allows you to lower your power to the 5 or 10 watt
level, so you have a choice of power output, depending on band
conditions. With a QRP-only rig, you're stuck at that power level.
It's also a power level that works best in the CW or digital modes, as
opposed to SSB.

bob
k5qwg

>
>
>Jim
>
>-----BEGIN PGP SIGNATURE-----
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>
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>ZKZCaUZJ2fbyliCeuMmHlFE=
>=oTUH
>-----END PGP SIGNATURE-----

2069. Re: High voltage and coupling from a vertical to adjacent coax

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 17:37:40 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <n95ig35hae0kvmjp9mhasoqelp5jji82e1@4ax.com>
Source record: 35801

On Sun, 07 Oct 2007 15:08:45 -0000, TF3KX <kristinn1@gmail.com> wrote:

>I am working on a topband vertical, approx. 12m/36ft tall, with four
>top hat wires sloping downwards, approx. 6m/18ft long each. Just
>about midway up this vertical I am contemplating mounting a dipole for
>the higher frequency bands, and running a coax from this dipole down
>along the vertical.

Hi Kristinn,

This may be the time to rethink both antennas. Hoist the dipole to the TOP of your vertical radiator and use IT for the top hat (after all, being lower will present proximity problems of the current top hat with the dipole). This, of course, will complicate things (like how to connect the dipole for dipole operation, and connect it for top hat operation).

>Now, I am worried about the interaction between the vertical antenna
>and this dipole coax. If I feed the vertical through an inductor at
>the base I presume there will be fairly high voltages on the entire
>vertical (I may run power up to a KW) and this may couple RF into the
>dipole coax, which in turn will give me RF where it ends, in the
>shack.

The solution (again, redesigning things) is to convert the vertical from base feed to gamma feed. This allows BOTH the vertical radiator and the dipole coax to be grounded at the bottom and to share the same current and voltage levels (and will solve half the top hat problem if you put the dipole at the top).

When both have the same potentials, there is no coupling between them - no high voltage problem except at the dipole feed point.

The solution here is to make the dipole one piece of wire connected at the middle to the top of the radiator (the top hat of the vertical), and to feed it with a small resonant loop. This will provide the voltage standoff to allow the coax to float near the vertical during its operation.

This is complex description in a short space, so I hope you can follow the outline of it and see the whole.

73's
Richard Clark, KB7QHC

2070. Re: yaesu FT-817ND without antenna tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 17:49:28 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <V_8Oi.118605$xZ2.9116@newsfe10.phx>
Source record: 35802

"Bob Miller" <NOSPAM@neosoft.com> wrote in message
news:9d4ig3pl39fo17jo1snomqsr6mu7ssslqh@4ax.com...
> On Sun, 07 Oct 2007 10:36:32 -0400, James Barrett <xucaen@comcast.net>
> wrote:
>
>>
>>I'm not worried about the low power either. I think having a high
>>powered radio for my first rig would make me lazy. It would be easier
>>for me to pump out wattage rather than fine tune my antenna. Besides
>>that, when I am ready for higher power, I could add an amplifier. One
>>thing at a time. ;-)
>
> Most of the current solid state 100 watt HF rigs have a menu
> adjustment that allows you to lower your power to the 5 or 10 watt
> level, so you have a choice of power output, depending on band
> conditions. With a QRP-only rig, you're stuck at that power level.
> It's also a power level that works best in the CW or digital modes, as
> opposed to SSB.
>
> bob
> k5qwg
>
I Agree with Bob - I operate QRP when the mood strikes me and propagation is
good. I have a Kenwood TS-870SAT which is adjustable from 100 Watts down to
a little less than 5 Watts. Have worked DXCC QRP - 2/3 SSB, 1/3 CW, but this
was at the solar cycle peak.

Propagation is poor now because we are at the bottom of the solar cycle
URL:
http://www.dxlc.com/solar/solcycle.html

At the peak of the solar cycle one can work the world with 5 Watts (if
propagation is favorable) particularly on the upper bands - 10M thu 15M. The
next solar peak is around the year 2011

Building your own antenna for multiband is challenging. A G5RV comes to
mind - but usually requires an external tuner (even if your rig has an
internal tuner). Most modern rigs may cover a 3 to 1 mismatch and a G5RV can
be well out of that range on some bands.

Good Luck
Lamont

2071. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 17:50:31 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1191779431.378014.53460@y42g2000hsy.googlegroups.com>
Source record: 35803

n...@wt.net wrote:
> On Oct 6, 3:19 pm, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
>
> >
> > If I remember correctly the oft quoted theorotical gain of a 5/8ths is with
> > a groundplane that extents to infinity.
> > 5/8ths with sloping 5/8th radials are begining to perform more like a
> > ceterfed collinear.
> >
> > Jimmie
>
> Exactly. That is what you want. A 5/8 element is only half an
> antenna,
> and the other half wants to be a 5/8 too to work properly. All a 5/8
> GP
> is , is half of an EDZ. You would never want to run only half of an
> EDZ,
> or use a 1/4 wave leg on one side, etc.. Like I say, it's a
> perversion.
> The 1/2 wave is the only single element that can be a proper complete
> antenna on it's own. Or according to the laws of NM5K anyway... :/
> And of course, even that "complete" antenna needs decoupling from
> the feedline to live up to it's full potential.
> The success of a 5/8 antenna varies a lot across the spectrum.
> On 2m, I hate em... Not a good pattern for VHF, unless you use the
> collinears, etc..
> But... On 10m, it's my favorite vertical.. I've done careful tests
> over
> the years, and I've never had any other type single element beat it.
> But... I was using 3/4 wave radials the last time I did do testing
> on all those.
> In one test, I started with a 1/4 wave GP with sloping radials.
> Worked ok..
> Then I built a 1/2 wave whip, and fed as a ringo.
> I saw an improvement over the 1/4 GP, even with no decoupling.
> So, I then decided to add a decoupling section, using a 1/4 wave
> section of the feedline below the feed, and attached to a set of
> 1/4 radials.
> This improved the antenna a good bit. It was really humming
> along at that point. I used mainly stable local signals to test
> any improvements. When I added the decoupling to the halfwave,
> I noticed a bit less bandwidth as far as the antenna, but the
> performance was more stable, and I assume would be about the
> same no matter what line length I used, etc..

> Anyway, I had the half wave working about as well as possible I
> think.
> Then I built a 5/8 radiator, and used 4 sloping 3/4 wave radials.
> Guess what? It beat the decoupled half wave by an easily noticed
> margin on the low angle space/ground wave paths I was using to
> test. The other stations were spread across town in various
> locations, some 30-40 miles away.
> If the low angle performance of the 5/8 was crippled, I sure
> didn't see it here on 10m. It still had enough gain at low angles
> to beat anything else I could try.
> BTW, all those antennas were mounted at the same 36 ft height.
> I also ran a 5/8 GP on 17m for a while. That antenna beat every
> other antenna I had that could be tuned for 17m. IE: wire
> dipoles, etc..
> I've seen a load of people use the usual "perverted" 5/8 GP
> on the CB band. Even with the short 1/4 radials, I never saw
> one of those lose to a 1/4 wave GP. On the average CB meter, '
> the change from a 1/4 GP to the 5/8 GP was normally good
> for about 2 S units on the average CB , if you were talking
> across town a ways. I've seen this too many times for it to
> be a fluke of nature. This goes back to the early 70's..
> Anyway, I like 5/8 verticals on the HF bands. But myself,
> I don't use the short 1/4 wave radials.
> As far as 5/8 whips on cars, just depends on the path.
> Here in Houston, with the flat terrain, a 5/8 will generally
> beat a 1/4 wave by a noticable amount, and will usually
> have less picket fencing.
> But in those cases, the metal under the antenna is fairly
> large vs wavelength. IE: a 5/8 at 146 mhz is about 48 inches.
> So it doesn't take a huge vehicle to give a decent ground
> plane if the antenna is on the roof or trunk.
> Myself, I think most mobile 5/8 whips work better than
> elevated 5/8 GP's used on the same band.
> In some areas, the terrain will favor using the 1/4 wave
> though.
> Like I say, the usual 5/8 with 1/4 wave straight radials
> is generally the pits on 2m, unless some strange quiver
> in the force kicks in, like say in phase feedline currents,
> etc. And thats fairly rare in the real world. It can happen
> though..
> A properly decoupled dual 5/8 collinear on 2m is a stout
> antenna and will be hard to beat unless you take drastic
> measures. Once I get to that point, I switch to a yagi if
> I want to do better. A 3 el yagi will pretty much smoke
> any practical vertical.
> Anyway, the performance of 5/8 antennas varies quite
> a bit depending on where you are using them at.
> The 5/8 with 3/4 radials I used on 10m was pretty
> stout overall. It was the best out of all the usual
> lengths.

> The real world and the modeling programs don't always
> exactly jive..
> IE: On Cevics page, he mentions that in his modeling
> tests, he seems to think the 5/8 GP was generally
> not worth the trouble on the upper HF bands.. IE: 10m
> I know from real world use, it is worth it. No doubt
> in my mind. But I also know there are much better
> radial lengths than the straight 1/4 wave.
> BTW, I agree with one thing he mentioned..
> Sloping 1/4 radials with the 5/8 is the pits... You want
> 1/4 wave radials straight out if they are under a 5/8
> whip. Sloping them will really whack out the pattern.
> But sloping radials are no problem under a 1/4 wave
> whip. Now, on the other hand, sloping 3/4 or 5/8
> radials under a 5/8 whip are ok.
> MK

This gives me a new way of looking at the Isopole antennas. I am begining to think the upper sleeve is not there for isolation but rather it is a radiator and the bottom sleeve is there to decouple it from the mast and feedline.

Jimmie

2072. Re: yaesu FT-817ND without antenna tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 17:50:56 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <bj6ig3l5nm169j88kjvg0mc705f1valmf7@4ax.com>
Source record: 35804

On Sat, 06 Oct 2007 15:05:01 -0400, James Barrett <xucaen@comcast.net>
wrote:

>I read some reviews on eHam too, and it almost sounds like the FT-817ND
>doesn't need a tuner.. I'm confused.
>Any opinions would be helpful.

Hi Jim,

I think the confusion of needing no tuner is that you won't burn out
the finals driving a short or an open (you don't have enough power to
light a candle). Of course, this is no recommendation for a
successful QSO, but matching from the manufacturer's point of view is
about keeping your rig out of their repair shop (where they risk
having a mad customer for any of a number of reasons).

Second, automatic tuners in the bigger, 100W units, don't work all
that well with random wire. Ultimately you are building the SAME
resonant antenna for both rigs for the SAME reason = getting all the
power to radiate. Moral: build/buy an external tuner.

Third, as to power, learn all about electronics and build yourself a
100W linear. Cheaper than a 1KW linear and you may even find/rob a
100W amplifier deck from a dead HF rig at a swap meet. Their input is
typically in the 1 to 2 Watt range and this design (the deck) has been
around for three decades (which means if you steal ANY schematic from
the equipment from ANY manufacturer for the past 30 years, you stand a
good chance of having the complete design already done with a complete
and mud-ordinary parts list).

73's
Richard Clark, KB7QHC

2073. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 18:38:35 UTC
From: oriel36 <kelleher.gerald@gmail.com>
Message-ID: <1191782315.752393.148770@o3g2000hsb.googlegroups.com>
Source record: 35805
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

On Oct 7, 2:46 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> oriel36 wrote:
> > 50 years later they dumped a medium on Newton anyway as 'absolute
> > space' and then conveniently rejected it all over again and then you
> > have 100 years of relativistic junk,some hopeless cases still think it
> > is an achievement but they are the ones who jump in here and try to
> > make you look like an idiot even though it may be a fair question.
>
> They were only confused about the nature of the "ether".

Again,the guys in the mid 19th century were inheriting a dilemma
Newton created when he rejected a medium.If you really have to believe
the cobblers of the last century where Albert rejects and aether by
attaching it to Newton's 'absolute space' then be my guest,it is an
incredible work of fiction but no more .

"The fictitious matter which is imagined as filling the whole of space
is of no use for explaining the phenomena of Nature, since the motions
of the planets and comets are better explained without it, by means of
gravity; and it has never yet been explained how this matter accounts
for gravity. The only thing which matter of this sort could do, would
be to interfere with and slow down the motions of those large
celestial bodies, and weaken the order of Nature; and in the
microscopic pores of bodies, it would put a stop to the vibrations of
their parts which their heat and all their active force consists in.
Further, since matter of this sort is not only completely useless, but
would actually interfere with the operations of Nature, and
weaken them, there is no solid reason why we should believe in any
such matter at all. Consequently, it is to be utterly rejected."
Optics 1704 Newton

So Cecil,if you read the article again and especially the top right
column you will see the distress of people who know they are stuck in
a rut but cannot find a way out of it.In the end they dumped aether on
Isaac as 'absolute space' and so began the relativistic junk. -

" In order to be able to look upon the rotation of the system, at
least formally, as something real, Newton objectivises space. Since he
classes his absolute space together with real things, for him rotation
relative to an absolute space is also something real. Newton might no
less well have called his absolute space ``Ether''; "Albert

Unless you have a severe reading disability,you will probably notice
Newton using explict terms like "utterly rejected" in regard to aether
hence the honest of the guys in the mid 19th century.

> Now we know that empty space is indeed not empty and
> is something (as opposed to absolute nothing) that some
> physicists describe as a "quantum soup" outside of which
> EM waves cannot propagate.
> --
> 73, Cecil http://www.w5dxp.com

Quantum soup no less !, created by the witches of Macbeth no doubt -

Round about the cauldron go;
In the poison'd entrails throw.
Toad, that under cold stone
Days and nights has thirty-one
Swelter'd venom sleeping got,
Boil thou first i' the charmed pot.
Double, double toil and trouble;
Fire burn, and cauldron bubble

The fiction Newton created is far more impressive than the one built by the guys in the early 20th century but the fiction of Newton has a very,very astrological slant and it began with the work of John Flamsteed.I would love to fill you in with the details but you appear content believing the guys in the mid 19th century were confused.They were not,they were desperate.

http://www.bodley.ox.ac.uk/cgi-bin/ilej/image1.pl?item=page&seq=9&size=1&id=bm.1843.10.x.54.336.x.425

2074. NEC-4 output file format questions?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 19:18:20 UTC
From: oeguet@gmx.de
Message-ID: <1191784700.434364.19130@o80g2000hse.googlegroups.com>
Source record: 35806

Hello,

I have no idea about NEC-4 output file format. Is there any samples
for looking into or documentation?
Thanks for any hints.

Regards,
Aziz

2075. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 19:23:15 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <DmaOi.7081$6p6.945@newssvr25.news.prodigy.net>
Source record: 35807
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

oriel36 wrote:
> I would love to fill you in with the details but you appear
> content believing the guys in the mid 19th century were confused. They
> were not,they were desperate.

Most of my information comes from, "The History of
Modern Science". In any case, "empty" space within
the universe does have some sort of quantum structure
and EM waves indeed do require that quantum medium.
That's why light cannot escape the universe.
--
73, Cecil http://www.w5dxp.com

2076. Re: NEC-4 output file format questions?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 20:00:34 UTC
From: jimlux@earthlink.net
Message-ID: <1191787234.948462.152270@v3g2000hsg.googlegroups.com>
Source record: 35808

On Oct 7, 12:18 pm, oeg...@gmx.de wrote:
> Hello,
>
> I have no idea about NEC-4 output file format. Is there any samples
> for looking into or documentation?
> Thanks for any hints.
>
> Regards,
> Aziz

Same as NEC-2

2077. Re: NEC-4 output file format questions?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 20:07:50 UTC
From: oeguet@gmx.de
Message-ID: <1191787670.492200.248910@d55g2000hsg.googlegroups.com>
Source record: 35809

Hello,

On 7 Okt., 22:00, jim...@earthlink.net wrote:
>
> Same as NEC-2

Really? If true, that would be fine.

Any small changes or is the format "exactly" the same?

2078. Re: yaesu FT-817ND without antenna tuner?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 21:21:43 UTC
From: Bob Bob <bob3bob3@suddenlink.net>
Message-ID: <88vnt4-jeq.ln1@p400bob.personal.cox.net>
Source record: 35810

Jim

I agree with Tam. It is way more cost effective to buy a 2nd hand 100W radio than a new low power one. It's easy to reduce output power when you want to. The only reason I would go so low is if I ever wanted to run it backpack portable.

Compare some prices! You will then be able to afford an ATU as well!

Cheers Bob VK2YQA

Tam/WB2TT wrote:
>> Unless you have experience with QRP, you might find this an exercise in
>> frustration. If you don't want to spend the money now, I would look for a
>> deal on a used 100W rig. There is not much to choose from in amplifiers
>> (other than VHF/UHF) that don't require 100W of drive.

2079. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 22:21:36 UTC
From: Jim-NN7K
Message-ID: <QZcOi.7087$6p6.4012@newssvr25.news.prodigy.net>
Source record: 35811

Yeh, Larson makes an antenna that is designed for(insulated) vehicles
(thinkit is the "OS" series, 1/2 wave) , and also, it is possible to use
regular 1/4, and 5/8 wave antennas on such, useing Burglar alarm, or
"Waterproofing Repair Tape" (2 Inch aluminium tape), available at
Home Depot, or Lowes. Tho NOT at a 45 degree angle, should make a
adaquate counterpoise for your antenna, and can be on either side of
the roof! Give it a try! Jim NN7K

John Smith wrote:

> Until recently, I owned an all fiberglass houseboat--beautiful rig.
> However, on fresh water it offered no counterpoise properties whatsoever.
>
> A continuously loaded 1/2 wave end fed vertical utilizing a modified
> gamma match feed ended up the solution, and one which required a minimal
> counterpoise.
>
> Regards,
> JS

2080. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 22:31:07 UTC
From: nm5k@wt.net
Message-ID: <1191796267.575158.156100@o80g2000hse.googlegroups.com>
Source record: 35812

On Oct 7, 12:50 pm, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> n...@wt.net wrote:

>
> This gives me a new way of looking at the Isopole antennas. I am
> begining to think the upper sleeve is not there for isolation but
> rather it is a radiator and the bottom sleeve is there to decouple it
> from the mast and feedline.
>
> Jimmie

Thats it.. The upper cone is appx 5/8 wave and is the lower element.
The lower cone should be appx a 1/4 wave and is for decoupling the
line.
MK

2081. Force 12 - C3S

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 22:45:46 UTC
From: leon_it@hotmail.com
Message-ID: <1191797146.574248.81080@50g2000hsm.googlegroups.com>
Source record: 35813

Hi,
i'm looking for the manual of Force12 - C3S
Can anyone send me a copy via e-mail ?
Thank you.

2082. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-07 23:41:09 UTC
From: "Green Xenon [Radium]" <glucegen1@excite.com>
Message-ID: <47096bfd$0$19628$4c368faf@roadrunner.com>
Source record: 35814
Cross-posted to: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

George Dishman wrote:
> "Green Xenon [Radium]" <glucegen1@excite.com> wrote in message
> news:47080705$0$24349$4c368faf@roadrunner.com...
>
>>On Oct 6, 6:24 am, "George Dishman" <geo...@briar.demon.co.uk> wrote in
>>http://groups.google.com/group/sci.energy/msg/ad14e4c2d56369db :
>>
>>
>>>"Green Xenon [Radium]" <gluceg...@excite.com> wrote in
>>
>>messagenews:47072242$0$15384$4c368faf@roadrunner.com...
>>
>>>...
>>
>>
>>>>... This receiver also has a robust signal processor
>>>>that can eliminate clipped-waveforms [such as square waves], spikes,
>>>>clicks, pops, hiss, and random noise
>>>>even at those trivial wattage
>>>>levels. After eliminating those unwanted signals, the carrier wave
>>>>
>>>>is
>>>>
>>>>amplified.
>>
>>>There is no carrier,
>>
>>Yes there is. Why do you say there isn't?
>
>
> Because a sine wave is a sine and you cannot
> distiguish one from another. There is no
> criterion that says anything is a "carrier"
> and not just part of the background hiss.

Okay. Sorry. "Carrier" is the wrong word. The radio reciever captures
and demodulated 2 GHz waves as if those waves are amplitude-modulated.
So this "carrier" is really the waves emitted from cosmic sources.

>
>>>it was one of those signals you just
>>>eliminated.
>>

>>How so?
>
>
> If you use a band pass filter at some frequency
> that you guess could be a carrier followed by an
> envelope detector, you get hiss. To eliminate
> the hiss, you have to eliminate all other
> frequencies so all you are left with is CW and
> the envelope detector then gives a DC output.

Okay.

>>>>If I am on this spaceship, what will
>>>>I most likely hear on the radio?
>>
>>>Stop trying to troll, you are too stupid to pull it off.
>>
>>I don't troll or spam. I am asking this question because -- unlikely [if
>>not impossible] as my 2-GHz-in-outer-space scenario is -- I am still
>>interested in it.
>>
>>Now please please please answer my question. What would I hear?
>
>
> Several people have answered you already, the
> answer is silence.

Wouldn't I hear sounds resulting from demodulating the 2 GHz waves in an
AM-manner?

2083. Ft-857d And ATAS 120a

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 01:38:15 UTC
From: maverrick <maverrickd@aol.com>
Message-ID: <1191807495.129971.30640@v3g2000hsg.googlegroups.com>
Source record: 35815

After having my vehicle broken into recently and my vhf/uhf radio stolen i decided to replace it with a FT-857D along with the ATAS 120a Antenna.
After reading lots of articals for and against the Atas i decided to purchase one for my self.
I installed the radio and atas but couldnt seem to get the atas to perform any low swr, the atas was fixed the the door side mount that my older aerial was but after checking it with a fluke meter i found that there was not a earth path from the mount to the suv body.
i solved this by fitted a seperate earth lead directly to the door pillar and mount, then i tried the atas again and what a difference,tuned in seconds even on the warc bands.

I managed to contact stations in zs,a,k,n and ve and most with good reports back to me owe and my location is GD so i have to say that for my first screwdriver type antenna it works well, the band i was using was 20m and 17m.
After a bit of playing Dx i tried 6m and managed to open a repeater 50 miles away and recieved good reports back.

The Ft-857D seems to work well as a mobile station.
I would like to here from anyone who as also used this combination and if they have moved away from the atas infavour of other types of screwdriver antennas.

http://www.gd7jwr.com

2084. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 03:51:11 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <POhOi.156749$Mu5.104431@newsfe15.phx>
Source record: 35816
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

"Cecil Moore" <nospam@w5dxp.com> wrote in message news:DmaOi.7081

< snip >

> Most of my information comes from, "The History of
> Modern Science". In any case, "empty" space within
> the universe does have some sort of quantum structure
> and EM waves indeed do require that quantum medium.
> That's why light cannot escape the universe.

You have some mind-bending implications there:

Such a quantum structure would not be coupled to the presence of matter. It would exist without mass.

The universe has discrete boundaries.

If EM waves reaching the boundary really do not escape and are not reflected (???) then the boundary is absorbing them and has a theoretical impedance of 377 ohms (same as what we innocently calculate for 'free space').

2085. Re: Force 12 - C3S

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 05:56:55 UTC
From: gb <w9nogbspam@arrlspamno.net>
Message-ID: <BMednUGgwpE0W5TanZ2dnUVZ_hqdnZ2d@comcast.com>
Source record: 35817

<leon_it@hotmail.com> wrote in message
news:1191797146.574248.81080@50g2000hsm.googlegroups.com...
> Hi,
> i'm looking for the manual of Force12 - C3S
> Can anyone send me a copy via e-mail ?
> Thank you.
>

Force 12 go out of business?
http://force12inc.com/F12-amateur-home-008.htm

http://force12inc.com/F12-Bro03-r1.9-pp12-14-C-Series-PDF.pdf

2086. Re: Coax: Protection from birds

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 07:11:42 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99C3AEDF363C2nonenowhere@61.9.191.5>
Source record: 35819

Alan Peake <adpeake@killspam.internode.on.net> wrote in
news:470A50CC.6010609@killspam.internode.on.net:

> Hi all,
> I seem to recall a while back, someone posting an article about
> stopping birds - parrots in particular - from nibbling away at coax and
> insulated wires. One of our local club members has 4X10 on 2m and 4X15

Alan,

I have suffered from birds (mainly Sulphur Crests) damaging coax.

For some years, I have been placing coax inside PE irrigation tube, and so far, have not sustained damage to cables protected in this way. The cockies have played around unwinding tape and breaking nylon ties, but they leave the irrigation tube alone.

It might work for you.

Owen

2087. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 09:38:17 UTC
From: michel
Message-ID: <4709fab4$0$236$e4fe514c@news.xs4all.nl>
Source record: 35820

>> MK
>
> I like the 5/8th on VHF because it has noticably more gain than a
> 1/4wl groundplane and in my opinon is easier to build and match than
> an end-fed 1/2wl antenna.
>
> Jimmie

Do you have some plans to build? I agree with your opinion.. Now looking for the best way to build

michel

2088. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 11:37:54 UTC
From: Mark@k4yzRobesin.org
Message-ID: <rj5kg3lg67brt2saugsspdlkjak6iofabo@4ax.com>
Source record: 35821
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS
bears repeating esp in terms of the recent rash of forgeries of me

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but google

posts from these sorucees are fakes

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

2089. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 13:21:51 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <470a2ef7$0$16494$4c368faf@roadrunner.com>
Source record: 35822

"michel" <nomail@@nomail.com> wrote in message
news:4709fab4$0$236$e4fe514c@news.xs4all.nl...
>
>>> MK
>>
>> I like the 5/8th on VHF because it has noticably more gain than a
>> 1/4wl groundplane and in my opinon is easier to build and match than
>> an end-fed 1/2wl antenna.
>>
>> Jimmie
>
> Do you have some plans to build? I agree with your opinion.. Now looking
> for the best way to build
>
>
> michel
>
>
Not really, I havent had to build one in a long time and I just usually look up it up on the net. Next paln may be a 5/8ths with 30 degree sloping 5/8 'radials' with 1/4 radials or sleeve used to decouple the antenna from the feedline.

Jimmie

2090. Re: NEC-4 output file format questions?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 15:21:45 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fedhu9$b2a$1@news.jpl.nasa.gov>
Source record: 35826

oeguet@gmx.de wrote:
> Hello,
>
> On 7 Okt., 22:00, jim...@earthlink.net wrote:
>
>>Same as NEC-2
>
>
> Really? If true, that would be fine.
>
> Any small changes or is the format "exactly" the same?
>

Exactly the same, except where you're looking for something that is done differently in NEC4 (e.g. NEC 4 supports catenaries, NEC2 doesn't, so the "readback" of the source deck is different)

But for things like near and far fields or segment currents, the format is the same.

2091. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 15:46:04 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <0hsOi.1358$IE2.665@newssvr22.news.prodigy.net>
Source record: 35823
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

Sal M. Onella wrote:
> Such a quantum structure would not be coupled to the presence of matter. It
> would exist without mass.

It could be the dark energy thought to make up ~65%
of the universe and be responsible for the universal
expansion of "empty" space.

> The universe has discrete boundaries.

The volume of the universe could be *unbounded* and
finite, as is the surface area of the earth.

> If EM waves reaching the boundary really do not escape and are not reflected
> (???) then the boundary is absorbing them and has a theoretical impedance
> of 377 ohms (same as what we innocently calculate for 'free space').

One can travel forever on the finite surface of the
earth without ever reaching a boundary. Without changing
direction on the two-dimensional surface of a sphere, one
simply arrives back at one's starting point. (The East
Indies can be reached by going the opposite direction.)

One can probably travel forever within the volume of a
finite universe without ever reaching a boundary. One
might even arrive back at one's starting point while
traveling only in a "straight line".
--
73, Cecil http://www.w5dxp.com

2092. Coax: Protection from birds

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 15:46:20 UTC
From: Alan Peake <adpeake@killspam.internode.on.net>
Message-ID: <470A50CC.6010609@killspam.internode.on.net>
Source record: 35818

Hi all,
I seem to recall a while back, someone posting an article about stopping birds - parrots in particular - from nibbling away at coax and insulated wires. One of our local club members has 4X10 on 2m and 4X15 on 432 MHz. We discovered that ALL of the 4:1 coax baluns had been chewed - some to the point that they were not connected to the yagis at all! Some of the baluns had sections completely missing. Amazingly enough, he still seemed to get out. Anyway, we have temporarily replaced the baluns but we need to find a way of preventing a reoccurrence of parrot pecking. All ideas and thoughts considered - sensible ones of course :)
73 de Alan

2093. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 15:48:32 UTC
From: Mark@k4yzRobesin.org
Message-ID: <t9kkg35g30mmomn5b2gk0bm0bfr9clj876@4ax.com>
Source record: 35824
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

why is the foger so carefull to bury this repost too

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

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posts from these sorucees are fakes

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

2094. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 16:00:44 UTC
From: oriel36 <geraldkelleher@yahoo.com>
Message-ID: <1191859244.038093.226610@r29g2000hsg.googlegroups.com>
Source record: 35825
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

On Oct 8, 4:46 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> Sal M. Onella wrote:
> > Such a quantum structure would not be coupled to the presence of matter. It
> > would exist without mass.
>
> It could be the dark energy thought to make up ~65%
> of the universe and be responsible for the universal
> expansion of "empty" space.
>
> > The universe has discrete boundaries.
>
> The volume of the universe could be *unbounded* and
> finite, as is the surface area of the earth.
>
> > If EM waves reaching the boundary really do not escape and are not reflected
> > (???) then the boundary is absorbing them and has a theoretical impedance
> > of 377 ohms (same as what we innocently calculate for 'free space').
>
> One can travel forever on the finite surface of the
> earth without ever reaching a boundary. Without changing
> direction on the two-dimensional surface of a sphere, one
> simply arrives back at one's starting point. (The East
> Indies can be reached by going the opposite direction.)
>
> One can probably travel forever within the volume of a
> finite universe without ever reaching a boundary. One
> might even arrive back at one's starting point while
> traveling only in a "straight line".
> --
> 73, Cecil http://www.w5dxp.com

I once thought that anyone believing the idea that the lament of light
leaving a star going to waste,hence 'warped space',was justing kidding
and did not really believe it but I have been proven wrong on that
count ,you people are quite serious about that insanity -

"This conception is in itself not very satisfactory. It is still less
satisfactory because it leads to the result that the light emitted by
the stars and also individual stars of the stellar system are
perpetually passing out into infinite space, never to return, and
without ever again coming into interaction with other objects of
nature. Such a finite material universe would be destined to become
gradually but systematically impoverished." Albert

http://www.bartleby.com/173/30.html

Again,I would fill you in with the details of how relativity protects Newton but you appear content with to believe you can set out and arrive back at the same place and indeed you can if you are an astrologer and liv in a 'warped space' predictive zodiacal framework
-

http://www.opencourse.info/astronomy/introduction/02.motion_stars_sun/celestial_sphere_anim.gif

Thanks for reminding me who I am dealing with and good luck to you.

2095. Re: Handheld Scanner Antenna Polarization Questions

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 16:54:42 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <470a60c4$0$4997$4c368faf@roadrunner.com>
Source record: 35827

"Robert11" <rgsros@notme.com> wrote in message
news:Y7mdnQTBz6HTv5vanZ2dnUVZ_rCtnZ2d@comcast.com...
> Hello,
>
> Will be buying one of the new GRE hand held scanners soon.
> Like all handhelds, it comes with the relatively short vertical whip
> antenna coming out of the top; I guess they are also termed
> rubber-duckies.
>
> Not all that sharp with antenna theory:
>
> My guess is that when held vertically, it is optimum for receiving
> verticall Polarized signals, and my guess is, also, that all P.D.'s and
> Fire Dept transmitters use vertically polarized signals.
> Is all this correct so far ?
>
> a. What happens if I lay the radio, with the antenna too of course,
> hotizontally on its side ?
> Will it still pick up "anything" ?
>
> b. Transmissions from airplanes: is there any meaningful polarization
> from their antennas, or is it pretty random by the time it reaches the
> ground, such that any any antenna orientation would be pretty much the
> same ?
>
> Thanks,
> Bob
>vhf/uhf aviation is vertical

2096. Tweaking 80 meters on multi-band dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 17:01:56 UTC
From: "Bob D." <bobmgtd@insightbb.com>
Message-ID: <G5idnf27xcrl_5fanZ2dnUVZ_oCvnZ2d@insightbb.com>
Source record: 35828

I have a multi band dipole with traps/loading-coils. I would like to raise the resonate frequency of the 80 meter band by 200 KHz. Can I simply shorten the 80 meter part of the dipole by the proportionate part of 200 KHz?

I.E. - λ wavelength at 80 meters = 66.9 ft.

200KHz/3.5MHz = .057

66.9 ft x .057 = 3.8 ft.

If I shorten each leg of the 80 meter section of the dipole by 3.8 ft, will that raise the resonate frequency reasonably close to 200 KHz? (If this were a simple monoband dipole, I would not hesitate to lope off the 3.8 ft. But with the coils, I'm not sure what the effect will be.)

BTW, this is a Delta Alpha DX-LB plus. I realize shortening the 80 meter section will also affect 160 meters. This should not be a problem because I want to raise 160 also.

--
Bob D. ND9B

2097. Re: Protection from birds

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 17:10:53 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <28Cdnb0-i7sH-ZfanZ2dnUVZ_oGjnZ2d@comcast.com>
Source record: 35829

"Alan Peake" <adpeake@killspam.internode.on.net> wrote in message
news:470A50CC.6010609@killspam.internode.on.net...
> Hi all,
> I seem to recall a while back, someone posting an article about
> stopping birds - parrots in particular - from nibbling away at coax and
> insulated wires. One of our local club members has 4X10 on 2m and 4X15 on
> 432 MHz. We discovered that ALL of the 4:1 coax baluns had been chewed -
> some to the point that they were not connected to the yagis at all! Some
> of the baluns had sections completely missing. Amazingly enough, he still
> seemed to get out. Anyway, we have temporarily replaced the baluns but we
> need to find a way of preventing a reoccurrence of parrot pecking. All
> ideas and thoughts considered - sensible ones of course :)
> 73 de Alan
>
Heliax or semirigid coax might cause them to give up. Especially the latter.
75 Ohm stuff would be fine for the 4:1 balun, because you actually would
want it to be 100 Ohms.

Tam/WB2TT

2098. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 17:43:32 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <8%tOi.58111$YL5.15037@newssvr29.news.prodigy.net>
Source record: 35830
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

oriel36 wrote:
> "This conception is in itself not very satisfactory. It is still less
> satisfactory because it leads to the result that the light emitted by
> the stars and also individual stars of the stellar system are
> perpetually passing out into infinite space, never to return, and
> without ever again coming into interaction with other objects of
> nature. Such a finite material universe would be destined to become
> gradually but systematically impoverished." Albert

However, we now know that it did indeed return as background
radiation. Therefore, space is probably finite and unbounded,
i.e. warped.

Albert also had a problem with "spooky action at a distance".

> Again,I would fill you in with the details of how relativity protects
> Newton

Relativity also protects the believers in the ether which
remains undetected because of relativity effects on the
ether itself.

> but you appear content with to believe you can set out and
> arrive back at the same place and indeed you can if you are an
> astrologer and liv in a 'warped space' predictive zodiacal framework

Being able to see a star behind the sun is enough proof for
me that gravity indeed warps space.
--
73, Cecil http://www.w5dxp.com

2099. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 17:50:29 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1191865829.761897.246240@v3g2000hsg.googlegroups.com>
Source record: 35831
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.antenna

On Oct 6, 3:17 pm, "Green Xenon [Radium]" <gluceg...@excite.com>
wrote:
> On Oct 6, 6:24 am, "George Dishman" <geo...@briar.demon.co.uk> wrote
inhttp://groups.google.com/group/sci.energy/msg/ad14e4c2d56369db:
>
> > "Green Xenon [Radium]" <gluceg...@excite.com> wrote in
> messagenews:47072242$0$15384$4c368faf@roadrunner.com...
> > ...
>
> > > ... This receiver also has a robust signal processor
> > > that can eliminate clipped-waveforms [such as square waves], spikes,
> > > clicks, pops, hiss, and random noise
> > > even at those trivial wattage
> > > levels. After eliminating those unwanted signals, the carrier wave
> > > > is
> > > amplified.
>
> > There is no carrier,
>
> Yes there is. Why do you say there isn't? Certain waveforms in the
> carrier wave that would cause the modulator signal to contain
> clipped-waveforms [such as square waves], spikes, clicks, pops, hiss,
> and random noise are removed. However, the remainder of the carrier-wave
> remains unscathed.
>
> > it was one of those signals you just
> > eliminated.
>
> How so?
>
> > > If I am on this spaceship, what will
> > > I most likely hear on the radio?
>
> > Stop trying to troll, you are too stupid to pull it off.
>
> I don't troll or spam. I am asking this question because -- unlikely [if
> not impossible] as my 2-GHz-in-outer-space scenario is -- I am still
> interested in it.
>
> Now please please please answer my question. What would I hear?
>
> I chose 2 GHz because it is in the UHF band. UHFs tend to be best for
> extremely long distance reception. Of the radio waves emitted by objects

> trillions of miles -- or more -- away, UHF is usually the most receivable.

Why do you say that "UHFs tend to the best for extremely long distance reception"? Have a look at the basic equation governing line-of-sight reception.

Why do you not answer your own question? It sounds to me like as reasonable a premise for a science fiction book as many that have been successful. You could perhaps spin it into quite an interesting story. You've already started with a premise that's so far from -- so very, very far from -- the current realities or even the dreams of people designing receivers that you may as well suppose you're going to receive whatever your wildest imagination might come up with. Since there is a nearly countless number of stars in the known universe, and since a large percentage of them could be planetary systems, each with the possibility of emitting interesting amplitude modulated carriers, your choices are pretty near limitless. Wow! Let your imagination run wild. It obviously did when you posed the question; you may as well let it run as wild with the answer. Back to you, Nonex!

Oh, and by the way, "spamming" comes, in one form, from posting too many places; I've trimmed off a whole bunch of groups for this reply. By my way of thinking, you're being pretty generous with yourself saying you don't spam.

2100. Re: Tweaking 80 meters on multi-band dipole

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 18:41:08 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <2bukg317ajrkqife165e93ilm911r4vhim@4ax.com>
Source record: 35832

On Mon, 8 Oct 2007 13:01:56 -0400, "Bob D." <bobmgtd@insightbb.com>
wrote:

>(If this were
>a simple monoband dipole, I would not hesitate to lope off the 3.8 ft. But
>with the coils, I'm not sure what the effect will be.)

Hi Bob,

By this parenthetical, it seems you already know this won't be easy.

Simple way to do this is loop back, say, 3 feet of wire and
electrially attach it to itself. This shortens the wire without
cutting it.

73's
Richard Clark, KB7QHC

2101. Re: Speedup NEC-Engine, using multiple CPU-Cores

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 19:30:37 UTC
From: oeguet@gmx.de
Message-ID: <1191871837.220744.113080@v3g2000hsg.googlegroups.com>
Source record: 35833

Update:

Now implemented also Radiation-Pattern-Division. It is working.

On most antenna calculations, there will be speed enhancements on multi-core / multi-processor systems with original windows-based NEC2 engines. But not for all antennas. It depends on many factors.

I achieved a seamless integration with fall backs, if there is no optimization possible. The generated (merged) output will be 100% compatible.

State now: Testing beta-version.
Coming State: Documentation and making on the web free (for private use) for download.

I hope, at the lastest one week there will be a first relase for download.

Regards,
Aziz

2102. Re: Protection from birds

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-08 21:07:52 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99C4487EB9DAFnonenowhere@61.9.191.5>
Source record: 35834

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in
news:28Cdnb0-i7sH-ZfanZ2dnUVZ_oGjnZ2d@comcast.com:

...
> Heliax or semirigid coax might cause them to give up. Especially the
> latter. 75 Ohm stuff would be fine for the 4:1 balun, because you
> actually would want it to be 100 Ohms.

Birds attack Heliax at this location, but less so than vinyl covered
coax.

Sulphur crests are a particular problem:
http://en.wikipedia.org/wiki/Sulphur-crested_Cockatoo

Nevertheless, Heliax is pretty much unaffected as they usually rip small
holes in the vinyl sheath which doesn't affect the cable due to the solid
external conductor, and even when they punch through the copper shield,
water will not soak throught the cable due to the closed cell foam that
is bonded to the shield with adhesive.

There might be more creative solutions Alan. I stopped feeding birds when
Sulphur Crests starting congretating en-masse and before they started
eating the house.

Owen

2103. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 00:46:32 UTC
From: ecregger <ecregger@bellsouth.net>
Message-ID: <ibAOi.5851$38.1077@bignews2.bellsouth.net>
Source record: 35835

"JIMMIE" <JIMMIEDEE123@YAHOO.COM> wrote in message
news:1191673069.917740.92540@o3g2000hsb.googlegroups.com...
>
> n...@wt.net wrote:
>> On Oct 2, 2:06 pm, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
>>
>> >
>> > The small theroretical gain advantage that a 5/8wl radiator has over a
>> > 1/2wl
>> > radiator is dependent on it having a very good counterpoise. However
>> > one
>> > may be able to fabricate a 5/8wl antenna with a couterpoise matched to
>> > the
>> > feedline with a stub made of metal tubing.
>> >
>> > Jimmie
>> The best "counterpoise" for a 5/8 radiator is a set of 5/8 radials...
>> But in that case, it's more of a collinear.
>> Myself, I think a 5/8 radiator should always be used with a 5/8
>> lower section of you want the full performance. IE: dual 5/8
>> collinear.
>> Anything else is a perversion... :/
>> My 2nd choice would be to use 3/4 wave radials.
>> 1/2 wave radials would be useless.
>> 1/4 wave radials are semi useless, and give a lousy pattern..
>> MK
>
> I like the 5/8th on VHF because it has noticably more gain than a
> 1/4wl groundplane and in my opinon is easier to build and match than
> an end-fed 1/2wl antenna.
>
> Jimmie
>

How can it get any easier than what I described in my article about the 2x4 based 1/2 wave J-Pole with the unconnected 1/4 wave matching stub placed 4" from the 1/2 wave radiator? You slide the alligator clips up and down the two elements until the SWR matches, then you're finished.

Of course, building a similar antenna for outdoor use will require some experimentation, but it shouldn't be that difficult to accomplish. The performance was just fine as far as I was concerned, working distant 30 mile away repeaters with ten watts or less from INSIDE the house (steel siding - no less) and obtaining full quieting on the repeater.

Ed Cregger, NM2K

2104. Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 02:16:37 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13glp45ltevoce4@corp.supernews.com>
Source record: 35836

I'm in Richmond, Virginia and I'm trying to noticeably improve my reception of WWV's 10MHz signal from Fort Collins, Colorado. It all seemed so simple, two weeks ago: wind some wire, solder a connector, and Hey...presto! a clean WWV signal. <grin!>

It wasn't so simple, and I'm afraid I've let it become an "ego thing" (see also: resource sink). I've outlined the problem below in the hope that someone can either suggest something I haven't already tried, or even point out something really dumb that I've been doing and shouldn't keep doing. <grin!>

Background

Several years back I inherited a Heathkit GCW-1001 Most Accurate Clock II from my father. This is an update to it's predecessor, Heath's GC-1000 Most Accurate Clock; its circuit, built around a Philips TDA1072A AM receiver IC and an 87C52 microprocessor, monitors WWV's 10MHz signal and decodes the BCD-coded 100Hz subcarrier (details at http://tf.nist.gov/stations/wwv.html) to keep the MAC-II accurate.

This MAC-II worked fine for my father: he had a 30 meter dipole of some kind in the attic, above the second floor of a house on a hill. For him, WWV's 10MHz signal from Fort Collins came in regular as... well, "clockwork". <igg!>

For me, in a one-story-plus-basement, in a low spot in a river valley, it's a different story. The GCW-1001 has a stack-o-LEDs signal strength indicator driven by the TDA1072's AGC output; it would wander between 2 and 4 LEDs with my 40" indoor dangling wire antenna, and it could take weeks or months for atmospheric conditions to randomly improve the signal to where the GCW-1001 could "lock in" a time.

Two weeks ago, in a fit of madness, I decided to try building a better antenna, one which would let the clock lock onto WWV at least, say, once a week. The tuned-loop antenna I've built _has_ increased the signal -- I'm seeing 4-5 LEDs lit on a regular basis, and 6 on occasion -- but the clock still isn't sync'ing to WWV's time signal. The clock face remains at a cute(?) 7-segment "not SEt" display. And what seems to be louder is the carrier -- or _a_ carrier, at any rate -- but not the tones or the human voice time callout coming out of the GCW-1001's speaker.

I seem to be up to my assets in alligators, and the swamp doesn't seem to be draining much.

Problem

My main problem is that, although the GCW-1001's LED "Signal" stack _says_ it's getting a stronger signal, what I hear through the speaker monitor isn't _clearer_. There are long periods when I cannot hear any WWV tones through the GC-1001's speaker, the tones/ticks are faint even when there are 5-6 LEDs lit, and the voice is almost never audible/distinguishable. The clock _seems_ to be sync-ing a little more often (it's done it four times in the past two weeks), but I had hoped it might happen a _little_ more frequently.

Am I asking too much? Is WWV's 10MHz signal from (say) 2,000 miles away, simply too weak to pick up solidly without an outdoor antenna?

What I've tried

My (second) attempt at a 30m indoor loop antenna:

Main loop (tuned): A 36" near-circle of #12 insulated house wire with an AM/FM tuning capacitor across it.

Pickup loop: One (36") turn of #27 magnet wire taped to the #12 loop with electrical tape<grin!>. The ends (scraped and tinned) are tied to the GCW-1001's 50ohm antenna input with a couple of 12" clip leads and a 3' section of coax.

The loops are mounted on (and held in shape by) a 1'x4'x0.5" "backboard" made of "blue foam" house insulation that I found in my basement; the loops are held in place by small plastic cable ties. The foam backing is resting against a (roughly) N-S wall, which _should_ orient the loop plane across the WWV wavefront for maximum pickup.

Does this sound like a reasonable attempt at a tuned 10MHz loop?

Is there any reason to believe that the foam backing would affect the loop inductance? I'm assuming it's a good insulator and nothing more, but that's an assumption.

Is it possible that I'm picking up a non-WWV dignal so strong that it's masking WWV? I tried tuning around 10MHz with a shortwave radio; it didn't find WWV -- not a particularly hopeful sign -- but it did pick up a station called (IIRC) WWCR. WWCR's 'web site (www.wwcr.com) lists its transmitter #4 as using 9.985MHz and 9.975MHz between 0900 and 2100 CST.

Any advice or suggestions will be appreciated, up to and including "You can't power a hedge trimmer from two AAA cells!".

Thanks...

Frank McKenney, McKenney Associates
Richmond, Virginia / (804) 320-4887
Munged E-mail: frank uscore mckenney ayut minds pring dawt cahm (y'all)
--
Physics is mathematical not because we know so much about the
physical world, but because we know so little; it is only its
mathematical properties that we can discover.
-- Bertrand Russell
--

2105. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 10:06:18 UTC
From: nm5k@wt.net
Message-ID: <1191924378.330032.314950@50g2000hsm.googlegroups.com>
Source record: 35839

On Oct 8, 9:16 pm, Frnak McKenney
<fr...@far.from.the.madding.crowd.com> wrote:

> Is it possible that I'm picking up a non-WWV dignal so strong that
> it's masking WWV? I tried tuning around 10MHz with a shortwave
> radio; it didn't find WWV -- not a particularly hopeful sign -- but
> it did pick up a station called (IIRC) WWCR. WWCR's 'web site
> (www.wwcr.com) lists its transmitter #4 as using 9.985MHz and
> 9.975MHz between 0900 and 2100 CST.

Sounds like it's being masked by some type of noise,
but this could just be from the signal being very weak.
If you can hear other stations ok, it probably the propagation
more than anything. Being that you can barely hear it on a
regular receiver seems to bear this out.
Unless a noise is local, and you are trying to null it, I see no
real advantage to using a small loop vs whatever else.
I would make sure you don't have any local noise. IE:
powerline noise, etc. If you did, the loop would be a good
antenna to null that noise as long as you can turn it.
But if there is no local noise, and the noise you hear is
atmospheric, then it's not going to matter much what
you use.
I've got a hunch that the propagation is just the pits for
you right now.
I wouldn't be surprised if you tried it in a couple of months
and it worked ok.. If you hear it on the regular radio ok,
the clock should too. If you can't hear it on the regular
radio, the clock probably won't either, and there is
probably not much you can do about it.
There should be times that it comes in fairly decent though,
depending on time of day, etc..
I would use what you hear on the regular receiver as to
whether the signal is really there or not.
Propagation on most of the HF bands has been fairly
flaky the last few months. IE: I got on 40m in the daytime
the last time I was in OK, and it was like I was on 20m..
Band was real stretched out, and pretty long skip zones.
I'd miss the semi locals I'd usually talk to, and end up
hearing stations 1000 miles away instead.
MK

2106. RFI Question for HF mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 14:19:26 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <feg2llfgg1@f04n12.cac.psu.edu>
Source record: 35840

In my HF mobile setup - a legal limit sized Bugcatcher on a 04 Suzuki Vitara - I have some significant RFI coming from my ECM module. Starts as soon as the ignition key is turned on - the engine doesn't need to be running.

I've gone through the usual things for mobile installation, like bonding the doors, exhaust system, frame, radiator and hood. Nothing on the fuel pump, as I 'd have to remove the tank to get at it. Only makes a small thwip upon starting, so isn't a big problem.

The ECM was verified by a small radio held at various places on the vehicle.

Any ideas? I did put some ferrites on the ECM wires. It helped some.

- 73 de Mike KB3EIA -

2107. Re: NEC-4 output file format questions?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 14:35:18 UTC
From: 4nec2 <4nec2@gmx.net>
Message-ID: <1191940518.383790.225470@v3g2000hsg.googlegroups.com>
Source record: 35741

If I remember correctly, position of the X-, Y- and Z-coordinates and magnitudes/phase for the near-field data in the output file differ one to three charcter-positions.

Arie.

2108. Re: Coax: Protection from birds

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 16:22:41 UTC
From: Alan Peake <adpeake@killspam.internode.on.net>
Message-ID: <470BAAD1.3070908@killspam.internode.on.net>
Source record: 35837

> Alan,
>
> I have suffered from birds (mainly Sulphur Crests) damaging coax.
>
> For some years, I have been placing coax inside PE irrigation tube, and so
> far, have not sustained damage to cables protected in this way. The cockies
> have played around unwinding tape and breaking nylon ties, but they leave
> the irrigation tube alone.
>
> It might work for you.
>
> Owen

G'Day Owen,

Looks like a good idea. I'm not sure what cockies they were - this
was at the QTH of VK2ZRE. I don't get galahs here and I don't have a
problem so it might be them. They had chewed up any PVC tape as well.
Oddly enough, they hadn't done much to the RG213 which are the main
feeders but the baluns are RG58 and appear to be of a softer covering.
Perhaps that's why they went for it - easier to chew :)
Anyway, I'll be back there tomorrow so will see if Ros has any PE tube
about. Being a "cockie" I'm sure he will have.

Cheers,
Alan

2109. Re: Protection from birds

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 16:27:32 UTC
From: Alan Peake <adpeake@killspam.internode.on.net>
Message-ID: <470BABF4.80204@killspam.internode.on.net>
Source record: 35838

>
> Heliax or semirigid coax might cause them to give up. Especially the latter.
> 75 Ohm stuff would be fine for the 4:1 balun, because you actually would
> want it to be 100 Ohms.
>
> Tam/WB2TT
>
>

100 ohms? This is just a half-wave coax balun. All the books say it
should be 50 ohms - same as the feed and the yagi. The only place where
a different Zo is used is where the four yagis combine. There, a
quarterwave section of TL of Zo=25 is used to match the 12.5 ohms of the
four yagis in parallel to the 50 ohm main feeder.
The main feeder is heliax so the birds haven't got to that - yet. (Tough
birds down here in VK!!)

Alan

2110. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 16:38:15 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <470bae62$0$19630$4c368faf@roadrunner.com>
Source record: 35742

<nm5k@wt.net> wrote in message
news:1191796267.575158.156100@o80g2000hse.googlegroups.com...
> On Oct 7, 12:50 pm, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>> n...@wt.net wrote:
>
>>
>> This gives me a new way of looking at the Isopole antennas. I am
>> begining to think the upper sleeve is not there for isolation but
>> rather it is a radiator and the bottom sleeve is there to decouple it
>> from the mast and feedline.
>>
>> Jimmie
>
> Thats it.. The upper cone is appx 5/8 wave and is the lower element.
> The lower cone should be appx a 1/4 wave and is for decoupling the
> line.
> MK
>
>

2111. Re: j-pole 5/8 wave

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 16:42:57 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <470baf82$0$32554$4c368faf@roadrunner.com>
Source record: 35743

<nm5k@wt.net> wrote in message
news:1191796267.575158.156100@o80g2000hse.googlegroups.com...
> On Oct 7, 12:50 pm, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
>> n...@wt.net wrote:
>
>>
>> This gives me a new way of looking at the Isopole antennas. I am
>> begining to think the upper sleeve is not there for isolation but
>> rather it is a radiator and the bottom sleeve is there to decouple it
>> from the mast and feedline.
>>
>> Jimmie
>
> Thats it.. The upper cone is appx 5/8 wave and is the lower element.
> The lower cone should be appx a 1/4 wave and is for decoupling the
> line.
> MK
>
>

How would this be significantly different from having 1/4 wl radials,
feedpoint, 5/8ths element, phasing section, 5/8th section?

Jimmie

2112. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 17:04:40 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fegcb7$1g9g$1@f04n12.cac.psu.edu>
Source record: 35744
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

Cecil Moore wrote:

> Being able to see a star behind the sun is enough proof for
> me that gravity indeed warps space.

Gravitational lenses are an even more dramatic from of the same.

- 73 de Mike KB3EIA -

2113. Re: Protection from birds

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 17:19:13 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <lcSdnYxOdPaWJZbanZ2dneKdnZydnZ2d@comcast.com>
Source record: 35745

"Alan Peake" <adpeake@killspam.internode.on.net> wrote in message
news:470BABF4.80204@killspam.internode.on.net...
>
>>
>> Heliax or semirigid coax might cause them to give up. Especially the
>> latter. 75 Ohm stuff would be fine for the 4:1 balun, because you
>> actually would want it to be 100 Ohms.
>>
>> Tam/WB2TT
>
> 100 ohms? This is just a half-wave coax balun. All the books say it should
> be 50 ohms - same as the feed and the yagi. The only place where a
> different Zo is used is where the four yagis combine. There, a quarterwave
> section of TL of Zo=25 is used to match the 12.5 ohms of the four yagis in
> parallel to the 50 ohm main feeder.
> The main feeder is heliax so the birds haven't got to that - yet. (Tough
> birds down here in VK!!)
>
> Alan
>
It is a 200 Ohm antenna. Each half is 100 Ohms to ground.When you put the 2
sides together you get 50 Ohms. Since the line is 1/2 wave long, any
impedance will work, including 50. CushCraft made a beta match 6 meter beam
which used a 1/2 wave section of RG11 75 Ohm coax. People have also use 93
Ohm coax, but its loss at 1:1 SWR is probably more than RG8 at 2:1 .

Tam

2114. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 19:00:44 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1191956444.157030.11580@22g2000hsm.googlegroups.com>
Source record: 35746

On Oct 9, 6:06 am, n...@wt.net wrote:
> On Oct 8, 9:16 pm, Frnak McKenney
>
> <fr...@far.from.the.madding.crowd.com> wrote:
>
> > Is it possible that I'm picking up a non-WWV dignal so strong that
> > it's masking WWV? I tried tuning around 10MHz with a shortwave
> > radio; it didn't find WWV -- not a particularly hopeful sign -- but
> > it did pick up a station called (IIRC) WWCR. WWCR's 'web site
> > (www.wwcr.com) lists its transmitter #4 as using 9.985MHz and
> > 9.975MHz between 0900 and 2100 CST.
>
> Sounds like it's being masked by some type of noise,
> but this could just be from the signal being very weak.
> If you can hear other stations ok, it probably the propagation
> more than anything. Being that you can barely hear it on a
> regular receiver seems to bear this out.
> Unless a noise is local, and you are trying to null it, I see no
> real advantage to using a small loop vs whatever else.
> I would make sure you don't have any local noise. IE:
> powerline noise, etc. If you did, the loop would be a good
> antenna to null that noise as long as you can turn it.
> But if there is no local noise, and the noise you hear is
> atmospheric, then it's not going to matter much what
> you use.
> I've got a hunch that the propagation is just the pits for
> you right now.
> I wouldn't be surprised if you tried it in a couple of months
> and it worked ok.. If you hear it on the regular radio ok,
> the clock should too. If you can't hear it on the regular
> radio, the clock probably won't either, and there is
> probably not much you can do about it.
> There should be times that it comes in fairly decent though,
> depending on time of day, etc..
> I would use what you hear on the regular receiver as to
> whether the signal is really there or not.
> Propagation on most of the HF bands has been fairly
> flaky the last few months. IE: I got on 40m in the daytime
> the last time I was in OK, and it was like I was on 20m..
> Band was real stretched out, and pretty long skip zones.
> I'd miss the semi locals I'd usually talk to, and end up
> hearing stations 1000 miles away instead.
> MK

Even with my antennas on a 150 foot tower there are times of day when WWV at 10 megacycles is not audible... This is just the way the daily propagation cycle is at 30 meters.
My best advice is to put up a dipole for 30 meters, even if you have to bend the ends to make it fit your space... A horizontal dipole being balanced picks up less vertically polarized noise than vertical antennas... Getting the wire outdoors will help also... You are likely picking up lots of humm and buzz inside the building from various electrical and electronic devices...

The other issue is whether your clock is actually able to synch with the WWV signal... You may have a defect in the clock... It would seem that 4 or 5 bars should have done the trick...

denny / k8do

2115. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 19:05:55 UTC
From: oriel36 <kelleher.gerald@gmail.com>
Message-ID: <1191956755.241569.221730@o80g2000hse.googlegroups.com>
Source record: 35747
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

On 8 Oct, 18:43, Cecil Moore <nos...@w5dxp.com> wrote:
> oriel36 wrote:
> > "This conception is in itself not very satisfactory. It is still less
> > satisfactory because it leads to the result that the light emitted by
> > the stars and also individual stars of the stellar system are
> > perpetually passing out into infinite space, never to return, and
> > without ever again coming into interaction with other objects of
> > nature. Such a finite material universe would be destined to become
> > gradually but systematically impoverished." Albert
>
> However, we now know that it did indeed return as background
> radiation. Therefore, space is probably finite and unbounded,
> i.e. warped.
>
> Albert also had a problem with "spooky action at a distance".
>
> > Again,I would fill you in with the details of how relativity protects
> > Newton
>
> Relativity also protects the believers in the ether which
> remains undetected because of relativity effects on the
> ether itself.
>
> > but you appear content with to believe you can set out and
> > arrive back at the same place and indeed you can if you are an
> > astrologer and liv in a 'warped space' predictive zodiacal framework
>
> Being able to see a star behind the sun is enough proof for
> me that gravity indeed warps space.
> --
> 73, Cecil http://www.w5dxp.com

You are very 'special' people at least those who traffic in relativity
and other such exotic junk. and I am a little surprised people have
not outgrown the excesses of the last century a lot sooner and a
little quicker when faced with the fiction but then again you are
unfamiliar with most of the srguments anyway.

SAGR." I know; such men do not deduce their conclusion from its
premises or establish it by reason, but they accommodate (I should
have said discommode and distort) the premises and reasons to a
conclusion which for them is already established and nailed down. No
good can come of dealing with such people, especially to the extent
that their company may be not only unpleasant but dangerous."

Dialogue Concerning the Two Chief World Systems, 1632 Galileo

For what it is worth,Newton created his own idiosyncratic astronomical outlook and relativity is merely the symptoms of that late 17th century disease,again,a very astrological one.Somehow people know that the garbage of the last century is just that but for the present it relies mostly on what Galileo correctly identifies as both unpleasent and dangerous.

Good luck to you and your 'warped space' colleagues.

2116. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 19:58:10 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99C53CAD89459nonenowhere@61.9.191.5>
Source record: 35749

Denny <k8do@mailblocks.com> wrote in news:1191956444.157030.11580@
22g2000hsm.googlegroups.com:

> The other issue is whether your clock is actually able to synch with
> the WWV signal... You may have a defect in the clock... It would seem
> that 4 or 5 bars should have done the trick...

Presumably the LED meter indicates recieved power, not signal to noise
ratio.

Owen

2117. Cheap n Easy Dipole Supports

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 19:59:36 UTC
From: w7psk@yahoo.com
Message-ID: <1191959976.803445.167480@o3g2000hsb.googlegroups.com>
Source record: 35748

Ive had my Dipole tween two trees for years now. Next door always
been rented and Mine has been there since the previous Owner let me
hang it up there. Well the recent renters Hacked the cord. And I
dont know the current owner. So I must do somthing in my yard.
Except I can only go into one corner and it slopes pretty quick down
about 8 feet at the end.

I can come up the fence about 15 feet to gain it back.

But what im looking for is a cheap way to hang the dipole end back up.

I have some room on the other tree to pull it back to make up the 15
feet I'd lose that way.

Thanks
Scotty W7PSK.

2118. Re: NEC-4 output file format questions?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 20:20:26 UTC
From: oeguet@gmx.de
Message-ID: <1191961226.964071.299200@k79g2000hse.googlegroups.com>
Source record: 35750

Hello Arie,

before be confronted with unseen and unexpected data, I will support
on the first version only "NEC-2D" output files.

NEC2 Engine Booster is finished now. Everybody will be impressed about
the performance, that can be taken from multi-core / multi-processor
enhancements.
I have started the documentation for the web.

On the coming version, I will support near-field (NH, NE-cards) data
too. And when I can get a NEC-4 engine for evaluating and testing,
than it will also support NEC-4 engines.

Thanks everybody for the help.
Greetings,
Aziz

On 9 Okt., 16:35, 4nec2 <4n...@gmx.net> wrote:
> If I remember correctly, position of the X-, Y- and Z-coordinates and
> magnitudes/phase for the near-field data in the output file differ one
> to three charcter-positions.
>
> Arie.

2119. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 20:32:59 UTC
From: ecregger <ecregger@bellsouth.net>
Message-ID: <BzROi.3400$s8.1633@bignews3.bellsouth.net>
Source record: 35751

"Owen Duffy" <none@no.where> wrote in message
news:Xns99C53CAD89459nonenowhere@61.9.191.5...
> Denny <k8do@mailblocks.com> wrote in news:1191956444.157030.11580@
> 22g2000hsm.googlegroups.com:
>
>> The other issue is whether your clock is actually able to synch with
>> the WWV signal... You may have a defect in the clock... It would seem
>> that 4 or 5 bars should have done the trick...
>
> Presumably the LED meter indicates recieved power, not signal to noise
> ratio.
>
> Owen

That's good!

Polarization was one of my thoughts.

Also, how is the synch tone derived by the receiver? Maybe that part of the radio needs tweaking? One would think that seven segments out of ten should be sufficient. I'm assuming there are ten segments total.

Ed, NM2K

2120. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 21:28:24 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <XnSOi.1177$R95.342@nlpi070.nbdc.sbc.com>
Source record: 35752
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

oriel36 wrote:
> You are very 'special' people at least those who traffic in relativity
> and other such exotic junk.

Actually, I disagree in part with all the theories.
I think the universe is finite and unbounded and
even though expanding at the present time, will
eventually collapse on itself into a Big Crunch.
I believe the expansion is mostly an illusion that
goes undetected because of relativity and dark
energy-matter effects.

> Good luck to you and your 'warped space' colleagues.

How do you explain a gravitational lens without
space being warped by a galaxy?
--
73, Cecil http://www.w5dxp.com

2121. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 21:52:23 UTC
From: keithm <vk1zkm@yahoo.com>
Message-ID: <470bf852$1@dnews.tpgi.com.au>
Source record: 35753

Since he said previously that he could hardly hear the tones/voice, isn't it probable that the receiver is just seeing mostly noise?

As mentioned by someone else, propagation is currently "very ordinary" (aka poor) at present, so maybe he's just out of range.

KeithM
VK1ZKM

"ecregger" <ecregger@bellsouth.net> wrote in message
news:BzROi.3400$s8.1633@bignews3.bellsouth.net...
>
> "Owen Duffy" <none@no.where> wrote in message
> news:Xns99C53CAD89459nonenowhere@61.9.191.5...
>> Denny <k8do@mailblocks.com> wrote in news:1191956444.157030.11580@
>> 22g2000hsm.googlegroups.com:
>>
>>> The other issue is whether your clock is actually able to synch with
>>> the WWV signal... You may have a defect in the clock... It would seem
>>> that 4 or 5 bars should have done the trick...
>>
>> Presumably the LED meter indicates recieved power, not signal to noise
>> ratio.
>>
>> Owen
>
>
> --------
>
>
> That's good!
>
> Polarization was one of my thoughts.
>
> Also, how is the synch tone derived by the receiver? Maybe that part of
> the radio needs tweaking? One would think that seven segments out of ten
> should be sufficient. I'm assuming there are ten segments total.
>
> Ed, NM2K
>

2122. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 22:22:07 UTC
From: ricknj10@hotmail.com
Message-ID: <470bfcd8.33970687@news.optonline.net>
Source record: 35754

I am in New Jersey. Propagation from Colorado to here is probably similar to Virginia.
This morning, Tues, 10/9, I listened to WWV on 10 MHz with the 4 antennas I have at my disposal to see what kind of signal level I get.
My antennas are 80 meter and 40 meter dipoles, a 20 meter yagi and a 30 meter dipole, all at about 50 feet.
On the first 3 antennas WWV runs about S6-9, and on the 30 meter dipole it is 10-20 db over 9.
This evening, 6 pm, the first 3 antennas haul WWV in at S9 and the 30 m dipole has it at a rock solid 30 over.
So I agree with the advice you got to string up some kind of dipole and throw out that loop, there is plenty of signal, you just have to go get it.

Rick K2XT

PS may I throw in a little commercial for my pet peeve? As you read this did you notice that I did not include any text from previous posts? Did you miss it?

2123. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 22:35:27 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fegvrdeuq1@news.service.uci.edu>
Source record: 35755

Cecil Moore wrote:

> I think the universe is finite and unbounded and
> even though expanding at the present time, will
> eventually collapse on itself into a Big Crunch.
> I believe the expansion is mostly an illusion that
> goes undetected because of relativity and dark
> energy-matter effects.

I've heard that believing in undetected phenomena can be a wonderful
way to pass the time. :-)

ac6xg

2124. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 22:50:25 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <470c04aa$0$7488$4c368faf@roadrunner.com>
Source record: 35756
Cross-posted to: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

The sound of your ship mates pushing you out of an airlock!

Green Xenon [Radium] wrote:

>(snip)
>
>If I am on this spaceship, what will I most likely hear on the radio?
>
>
>Thanks,
>
>Radium
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

2125. Stand offs for ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 22:54:04 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99C4A1C22F3E8HuckleberryREMOVEbig@198.186.192.196>
Source record: 35757

I have need to support some W7FG 600 ohm ladderline up a 20'tall, 1" diameter steel mast.

Can anyone recommend either factory made, or home made means of providing such support for this situation?

Thanks.

Ed K7AAT

2126. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 23:27:18 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <o7UOi.2330$sm6.1389@nlpi069.nbdc.sbc.com>
Source record: 35758

Jim Kelley wrote:
> I've heard that believing in undetected phenomena can be a wonderful way
> to pass the time. :-)

Could have made a hero out of someone who predicted
RF waves before they were detected.
--
73, Cecil http://www.w5dxp.com

2127. Re: Stand offs for ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 23:28:48 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <O8UOi.2331$sm6.908@nlpi069.nbdc.sbc.com>
Source record: 35759

Ed G wrote:
> Can anyone recommend either factory made, or home made means of
> providing such support for this situation?

I used 6" plastic electric fence standoffs.
--
73, Cecil http://www.w5dxp.com

2128. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-09 23:51:39 UTC
From: Dan Richardson <k6mhe@k6mhe.com>
Message-ID: <up4og3h0nat08nj6ssru2s4ms4nnkfa7rd@4ax.com>
Source record: 35760

On Tue, 09 Oct 2007 22:22:07 GMT, ricknj10@hotmail.com (Rick) wrote:

>PS may I throw in a little commercial for my pet peeve? As you read this did
>you notice that I did not include any text from previous posts? Did you miss
>it?

No, but someone reading the message from an archive at some later date
may be puzzled what you are commenting on.

My understanding is to include the portion of the message that you are
replying to (as I have done here) so some other person - who may not
have been following the thread - can better stand your comments.

73,
Danny, K6MHE

2129. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 00:06:24 UTC
From: ricknj10@hotmail.com
Message-ID: <470c1747.40737828@news.optonline.net>
Source record: 35761

>
>My understanding is to include the portion of the message that you are
>replying to (as I have done here)

Danny, perfection. Absolute perfection.
You de Man.

Rick

2130. Re: Stand offs for ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 00:31:12 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99C4B23A1207HuckleberryREMOVEbig@198.186.192.196>
Source record: 35762

>> Can anyone recommend either factory made, or home made means of
>> providing such support for this situation?

> I used 6" plastic electric fence standoffs.

Cecil, How did you fasten them to the 1" dia. steel mast?

Ed

2131. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 00:46:46 UTC
From: Sjouke Burry <burrynulnulfour@ppllaanneett.nnlll>
Message-ID: <470c20f6$0$25477$ba620dc5@text.nova.planet.nl>
Source record: 35763
Cross-posted to: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

```
**THE-RFI-EMI-GUY** wrote:
> The sound of your ship mates pushing you out of an airlock!
>
> Green Xenon [Radium] wrote:
>
>> (snip)
>>
>> If I am on this spaceship, what will I most likely hear on the radio?
>>
>>
>> Thanks,
>>
>> Radium
>>
>>
>
Thats a stupid waste of reaction mass. Convert him.
As fuel it would be the first time he would be useful.
```

2132. second-hand TV distribution equipment

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 01:00:45 UTC
From: Bill Wright <insertmybusinessname@f2s.com>
Message-ID: <TqGdnYweHJ7_sZHanZ2dnUVZ8tHinZ2d@pipex.net>
Source record: 35765

My daughter is having one of her periodic eBay sales. It's all second-hand TV distribution equipment.

http://myworld.ebay.co.uk/tvaerialguy/

Bill

2133. New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 01:03:30 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1191978210.645113.273600@o80g2000hse.googlegroups.com>
Source record: 35764

www.newswise.com/articles/view/532935

2134. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 02:35:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fehdpd$381$1@news.albasani.net>
Source record: 35766

art wrote:
> www.newswise.com/articles/view/532935
>

Yeah, ole' Robert Vincent is a sore spot in the NG, I'd imagine. Made A$$'es out of all the "experts" and continues to do so ... sometimes there is real justice.

Regards,
JS

2135. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 03:35:04 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <470C4868.2070805@bellsouff.net>
Source record: 35767

Rick wrote:
> I am in New Jersey. Propagation from Colorado to here is probably similar to
> Virginia.
> This morning, Tues, 10/9, I listened to WWV on 10 MHz with the 4 antennas I
> have at my disposal to see what kind of signal level I get.
> My antennas are 80 meter and 40 meter dipoles, a 20 meter yagi and a 30 meter
> dipole, all at about 50 feet.
> On the first 3 antennas WWV runs about S6-9, and on the 30 meter dipole it is
> 10-20 db over 9.
> This evening, 6 pm, the first 3 antennas haul WWV in at S9 and the 30 m
> dipole has it at a rock solid 30 over.
> So I agree with the advice you got to string up some kind of dipole and throw
> out that loop, there is plenty of signal, you just have to go get it.
>
> Rick K2XT
>
> PS may I throw in a little commercial for my pet peeve? As you read this did
> you notice that I did not include any text from previous posts? Did you miss
> it?
>
>

Some of us include the previous post's text because we can't remember
what we're answering unless we can refer to it while writing.

You too will grow old someday, if you live so long. <G>

Ed Cregger, NM2K

2136. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 03:35:21 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <ELXOi.4633$fa.947@bignews5.bellsouth.net>
Source record: 35768

Rick wrote:
> I am in New Jersey. Propagation from Colorado to here is probably similar to
> Virginia.
> This morning, Tues, 10/9, I listened to WWV on 10 MHz with the 4 antennas I
> have at my disposal to see what kind of signal level I get.
> My antennas are 80 meter and 40 meter dipoles, a 20 meter yagi and a 30 meter
> dipole, all at about 50 feet.
> On the first 3 antennas WWV runs about S6-9, and on the 30 meter dipole it is
> 10-20 db over 9.
> This evening, 6 pm, the first 3 antennas haul WWV in at S9 and the 30 m
> dipole has it at a rock solid 30 over.
> So I agree with the advice you got to string up some kind of dipole and throw
> out that loop, there is plenty of signal, you just have to go get it.
>
> Rick K2XT
>
> PS may I throw in a little commercial for my pet peeve? As you read this did
> you notice that I did not include any text from previous posts? Did you miss
> it?
>
>

Some of us include the previous post's text because we can't remember
what we're answering unless we can refer to it while writing.

You too will grow old someday, if you live so long. <G>

Ed Cregger, NM2K

2137. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 03:51:33 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fehi8bmsj2@news.albasani.net>
Source record: 35769

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

http://www.eetimes.com/news/semi/showArticle.jhtml?articleID=202400285

Regards,
JS

2138. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 05:35:29 UTC
From: Robert Smts <bob@rsmits.ca>
Message-ID: <6f6e0e8d25d6272677a7129696f53cc7@grapevine.islandnet.com>
Source record: 35770

Frnak McKenney wrote:

>
> I'm in Richmond, Virginia and I'm trying to noticeably improve my
> reception of WWV's 10MHz signal from Fort Collins, Colorado. It all
> seemed so simple, two weeks ago: wind some wire, solder a
> connector, and Hey...presto! a clean WWV signal. <grin!>
>
> It wasn't so simple, and I'm afraid I've let it become an "ego
> thing" (see also: resource sink). I've outlined the problem below
> in the hope that someone can either suggest something I haven't
> already tried, or even point out something really dumb that I've
> been doing and shouldn't keep doing. <grin!>

Frank, can't you erect anything outside at all? A 10 metre dipole, is after all, only about 5 metres long. And if you can't do that, what kind of attic do you have? If your house is oriented correctly, you could even build a three element wire yagi pointed west inside the attic. Dimensions shouldn't be that critical for receive only, and space the elements at about 2.5 metres. Basically one element at about 47 feet, one at about 49.3 feet, and one at about 45 feet. Split the 47 ft one into two, feed it directly with 50 ohm coax, one side to the shield, one to the centre conductor, and you have a three element wire beam pointed, hopefully, west. (Put the longest element on the east side, the shortest on the west.)

Bob, VE7HS

2139. Re: Cheap n Easy Dipole Supports

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 05:49:08 UTC
From: Robert Smts <bob@rsmits.ca>
Message-ID: <b7aab29872290c941765c7320ec40a2f@grapevine.islandnet.com>
Source record: 35771

w7psk@yahoo.com wrote:

> Ive had my Dipole tween two trees for years now. Next door always
> been rented and Mine has been there since the previous Owner let me
> hang it up there. Well the recent renters Hacked the cord. And I
> dont know the current owner. So I must do somthing in my yard.
> Except I can only go into one corner and it slopes pretty quick down
> about 8 feet at the end.
>
> I can come up the fence about 15 feet to gain it back.
>
>
> But what im looking for is a cheap way to hang the dipole end back up.
>
>
> I have some room on the other tree to pull it back to make up the 15
> feet I'd lose that way.
>
>
> Thanks
> Scotty W7PSK.

Use the longest 2 X 4s or 2 X 6s you can find, and make an an A frame out of them, with the bottom 2 to 3 ft wide. Bolt them to some stakes driven into the ground next to the fence, and then stand up the A frame against the fence. With luck, you should be able to get 20 ft or more, even if you need to bolt a couple of 2 X 4s together to lengthen them.

Otherwise, you could do the same thing with an aluminum house ladder that goes up to 30 or 40 ft, and use it to tie the antenna to.

Bob, VE7HS

2140. Re: Cheap n Easy Dipole Supports

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 06:18:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13gorlm7j4f4saa@corp.supernews.com>
Source record: 35772

Robert Smts wrote:
>
> Use the longest 2 X 4s or 2 X 6s you can find, and make an an A frame out of
> them, with the bottom 2 to 3 ft wide. Bolt them to some stakes driven into
> the ground next to the fence, and then stand up the A frame against the
> fence. With luck, you should be able to get 20 ft or more, even if you need
> to bolt a couple of 2 X 4s together to lengthen them.
>
> Otherwise, you could do the same thing with an aluminum house ladder that
> goes up to 30 or 40 ft, and use it to tie the antenna to.
>
> Bob, VE7HS

Just a week ago I took down a 40 foot high 2 X 4 wood (untreated Douglas fir) A-frame I've had up for about 30 years. It hasn't had any maintenance except for a couple of coats of deck stain. It finally developed enough rot at points where it was nailed and bolted that it had to come down. The A-frame was built according to the design which has been in the ARRL Antenna Book for decades. It's still there -- look for "A-frame mast" in the index. I once made a slightly shorter one with 2 X 3 lumber. It was a lot lighter and easier to handle, and plenty strong. Even 2 X 2s would be ok for moderate height, if you can find some reasonably clear pieces. If you're going to be supporting it with something like a fence, you'll need to keep the weight to quite a bit less than my 40 foot 2 X 4 version. Lower height, smaller dimension lumber, a lighter type of wood, or some combination should get you something usable.

Roy Lewallen, W7EL

2141. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 12:12:52 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13gpge4ph7bp041@corp.supernews.com>
Source record: 35774

MK,

Hi. Thanks for taking the time to respond.

On Tue, 09 Oct 2007 03:06:18 -0700, nm5k@wt.net <nm5k@wt.net> wrote:
>On Oct 8, 9:16 pm, Frnak McKenney
<fr...@far.from.the.madding.crowd.com> wrote:
>
>> Is it possible that I'm picking up a non-WWV dignal so strong that
>> it's masking WWV? I tried tuning around 10MHz with a shortwave
>> radio; it didn't find WWV -- not a particularly hopeful sign -- but
>> it did pick up a station called (IIRC) WWCR. WWCR's 'web site
>> (www.wwcr.com) lists its transmitter #4 as using 9.985MHz and
>> 9.975MHz between 0900 and 2100 CST.

>Sounds like it's being masked by some type of noise,
>but this could just be from the signal being very weak.
>
>If you can hear other stations ok, it probably the propagation
>more than anything. Being that you can barely hear it on a
>regular receiver seems to bear this out.

Sigh. So... there isn't some kind of cubist-wire-sculpture shape I
can bend my antenna into and magically make WWV appear? <grin!>

>Unless a noise is local, and you are trying to null it, I see no
>real advantage to using a small loop vs whatever else.

I constrained the problem by insisting on "indoor" and "small".
From your feedback, and my experience, it looks like I won't get
much further unless/until I'm willing to relax one of my
constraints.

>I would make sure you don't have any local noise. IE:
>powerline noise, etc. If you did, the loop would be a good
>antenna to null that noise as long as you can turn it.
>But if there is no local noise, and the noise you hear is
>atmospheric, then it's not going to matter much what
>you use.

I built a long-wire "antenna" last evening and I _thought_ my signal
picked up a bit... for a little while, anyway. I took a 100'
extension cord and unreeled it from the west end of the house to the
east end where the MAC-II is set up. On the floor. (Hardly a
"phased array"<grin!>, but I wanted to try _something_.)

I put the (plastic) reel with the rest of the cord up about a foot away from my "loop", and I did seem to get a stronger signal (translation: on the fade-ins it sounded a bit louder). I could hear the "notes" fairly well at times and I could _almost_ make out what was being said in the the voice segment. On the other hand, this was somewhere around 1800, give or take an hour, and the signal was fading in and out... it could have simply been due to atmospheric conditions.

One good thing I learned was that I may have been tuning my antenna incorrectly. It seems that there is a "roaring" that peaks the GCW-1001's LED stack, but when I can distinguish the WWV tones and maximize their loudness through the speaker I'm slightly _below_ that "roaring". In other words, I _have_ been mis-tuning, and inadvertently helping drown WWV's signal out. Ouch. Wish I had an accurate 10MHz signal generator; what I have is intended for audio work and limited to about 1.5MHz.

>I've got a hunch that the propagation is just the pits for
>you right now.

Well, that's certainly a true description of what I'm experiencing <grin!>, but I've had the MAC-II since 2004 and suffered the same poor lock-in, and a MAC-I (GC-1000) a decade (ack!) behaved similarly. 'Course, I used its built-in whip (something the MAC-II lacks); I didn't build _it_ an antenna of its very own. <grin!>

>I wouldn't be surprised if you tried it in a couple of months
>and it worked ok.. If you hear it on the regular radio ok,
>the clock should too. If you can't hear it on the regular
>radio, the clock probably won't either, and there is
>probably not much you can do about it.

I was afraid of that. I suppose I could build a battery-powered RF amplifier and stick it on the antenna, but the trick (stop me if you've heard this one <grin!>) is to make just-the-stuff-I-want louder. Making _everything_ louder doesn't help me.

>There should be times that it comes in fairly decent though,
>depending on time of day, etc..
>I would use what you hear on the regular receiver as to
>whether the signal is really there or not.

You're probably right. Means I have to clear off some more lab bench space next to the MAC-II, and I should probably re-tighten the dial cord on the Mohican and dust off its tuning capacitor plates. <grin!>

This may wind up being a classic example of the "DIY->DYI Transformation": a "really neat" do-it-yourself idea which started out simply enough, but which has somehow turned into a must-complete, spare-no-expenses Do-Yourself-In Project. <grin?>

>Propagation on most of the HF bands has been fairly
>flaky the last few months. IE: I got on 40m in the daytime
>the last time I was in OK, and it was like I was on 20m..
>Band was real stretched out, and pretty long skip zones.
>I'd miss the semi locals I'd usually talk to, and end up
>hearing stations 1000 miles away instead.

So... if I ran this really long piece of coax out to Oklahoma, then I could pick up Fort Collins really well via skip? I've got a bunch of A/V 75ohm stuff, and some old T-Base2 Ethernet cables; that's a start... (Riiiight! <grin!>)

I think it's time to step back and think about what I've discovered and learn a bit more theory; my ARRL Antenna Handbook (1991ed) arrived in yesterday's mail, so I'll be learning from The Source. (I sent my brother Bruce an e-mail message a few days back explaining why antenna length mattered; it made sense at the time, but I may have to revise it after some more reading.)

And, if I decide I need a radio-based time source before I can get a good WWV signal, I could always hack a WWVB clock -- as long as it had a dead LCD panel or something: I have this weird reluctance to tear apart anything that is still working. <grin!>

Assuming, of course, that I can pick up WWV_B_ here. <grin?>

Anyway, thanks for reassuring me that my poor WWV reception really might not be due to a poor antenna design. If I ever come up with a Really Good Solution I'll post back here.

Frank
--
Do not follow where the path may lead. Go instead where there is
no path and leave a trail. -- Ralph Waldo Emerson
--
Frank McKenney, McKenney Associates
Richmond, Virginia / (804) 320-4887
Munged E-mail: frank uscore mckenney ayut minds pring dawt cahm (y'all)

2142. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 12:34:08 UTC
From: gsm@mendelson.com
Message-ID: <slrnfgphik.92i.gsm@cable.mendelson.com>
Source record: 35775

Frnak McKenney wrote:
> Anyway, thanks for reassuring me that my poor WWV reception really
> might not be due to a poor antenna design. If I ever come up with a
> Really Good Solution I'll post back here.

What would help you is an outdoor active antenna. For a start look at MFJ's.
It's a metal box with an amplifier in it, and a whip antenna. It uses a
small box at the receiver end to pass DC up the coax to power it.

Placing it outside would help. Placing it outside and away from noise
sources, or on the roof would help more. A whip antenna is used because
it's a cheap commerical off-the-shelf (COTS) item. It could be replaced
with a thin wire. The coax could be replaced with a run of (more expensive)
mini-coax. This would make it easier to hide and you may be able to use it.

If you are handy with building things, there are lots of designs for similar
devices, the easiest is a single MMIC type amplfier. It may be more difficult
to actually do as they are very sensitive to static.

If all you have is a window, a loop around it would do. If it has a metal frame,
and all 4 sides are connected to each other, you can try using it as a loop.
If not, thin wire held up by transparent tape, or that metal tape used by
alarm systems would work.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

2143. New state of matter discovered! was Re: RFI Question for HF mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 12:37:05 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <feih1hfne1@f04n12.cac.psu.edu>
Source record: 35776

Michael Coslo wrote:

Just kidding! I'm trying to get on-topic for this group.. ;^)

- 73 de Mike KB3EIA -

2144. Recommendation sought: Handheld transceiver for 2 meters (& maybe 70 cm)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 15:04:10 UTC
From: Steve <sdaniel13@speakeasy.net>
Message-ID: <1192028650.604882.302440@19g2000hsx.googlegroups.com>
Source record: 35777

I'm looking to purchase one new. Have looked over the ones available at Universal, especially the Icom and Kenwood models, but would like to hear from folks who have experience with them (or others). Will consider a dual bander as well. Decent audio would be nice!

Thanks,

Steve

2145. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 15:47:42 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192031262.831496.233530@57g2000hsv.googlegroups.com>
Source record: 35778

On 9 Oct, 19:35, John Smith <assemblywiz...@gmail.com> wrote:
> art wrote:
> >www.newswise.com/articles/view/532935
>
> Yeah, ole' Robert Vincent is a sore spot in the NG, I'd imagine. Made
> A$$'es out of all the "experts" and continues to do so ... sometimes
> there is real justice.
>
> Regards,
> JS

Yup, the experts were not experts after all just phony's.
Ofcourse we now have to wait for comments like " I knew that all the
time",
"I have been using that method for years", "that was invented by
Mantovani
a hundred yeard ago but he just didn't get around to printing it"
Art

2146. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 16:04:17 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <feit65$ml8$1@news.albasani.net>
Source record: 35779

art wrote:

> ...
> a hundred yeard ago but he just didn't get around to printing it"
> Art
>

Art:

You forgot:

"Although the Navy meant well, it's test data was in error!" :-)

Regards,
JS

2147. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 16:50:15 UTC
From: oriel36 <kelleher.gerald@gmail.com>
Message-ID: <1192035015.959728.71030@22g2000hsm.googlegroups.com>
Source record: 35780
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

On Oct 9, 10:28 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> oriel36 wrote:
> > You are very 'special' people at least those who traffic in relativity
> > and other such exotic junk.
>
> Actually, I disagree in part with all the theories.
> I think the universe is finite and unbounded and
> even though expanding at the present time, will
> eventually collapse on itself into a Big Crunch.
> I believe the expansion is mostly an illusion that
> goes undetected because of relativity and dark
> energy-matter effects.
>
> > Good luck to you and your 'warped space' colleagues.
>
> How do you explain a gravitational lens without
> space being warped by a galaxy?
> --
> 73, Cecil http://www.w5dxp.com

To borrow from Galileo again -

SALV. "The same thing has struck me even more forcibly than you. I
have heard such things put forth as I should blush to repeat--not so
much to avoid discrediting their authors (whose names could always be
withheld) as to refrain from detracting so greatly from the honor of
the human race. In the long run my observations have convinced me that
some men, reasoning preposterously, first establish some conclusion In
their minds which, either because of its being their own or because of
their having received it from some person who has their entire
confidence, impresses them so deeply that one finds it impossible ever
to get it out of their heads. Such arguments in support of their fixed
idea as they hit upon themselves or hear set forth by others, no
matter how simple and stupid these may be, gain their instant
acceptance and applause. On the other hand whatever is brought forward
against it, however ingenious and conclusive, they receive with
disdain or with hot rage--if indeed it does not make them ill. Beside
themselves with passion, some of them would not be backward even about
scheming to suppress and silence their adversaries. I have had some
experience of this myself."
Dialogue Concerning the Two Chief World Systems

It is many years now since I dealt with relativity or rather the
people who are proponents and opponents of that exotic

junk,occasionally I will join a thread but even then only as a cameo appearance.When I looked at Albert's explanation for 'warping space' based on the lament that light leaving stars was going to waste I thought it was hilarious and still do but nothing could have prepared me for his rejection of the idea of stellar islands -

"This view is not in harmony with the theory of Newton. The latter theory rather requires that the universe should have a kind of centre in which the density of the stars is a maximum, and that as we proceed outwards from this centre the group-density of the stars should diminish, until finally, at great distances, it is succeeded by an infinite region of emptiness. The stellar universe ought to be a finite island in the infinite ocean of space."

http://www.bartleby.com/173/30.html

In 1925 ,five years after he wrote that conclusion,these things showed up -

http://web.mit.edu/kayla/Public/Backgrounds/Space%20-%20Andromeda%20Galaxy.jpeg

Look,I have no axe to grind and if you wish to believe the cobblers of the last century then fair play to you,two thumbs up and whatever other accolade I can throw in your direction,I find the whole thing funny but that is just me.

2148. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 17:05:45 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192035945.220535.119770@g4g2000hsf.googlegroups.com>
Source record: 35781

On 10 Oct, 09:04, John Smith <assemblywiz...@gmail.com> wrote:
> art wrote:
>
> > ...
>
> > a hundred yeard ago but he just didn't get around to printing it"
> > Art
>
> Art:
>
> You forgot:
>
> "Although the Navy meant well, it's test data was in error!" :-)
>
> Regards,
> JS

What was the error? The antenna feed line is part of the antenna
system is it not?
If it radiates then what is the problem?
Art
Art

2149. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 17:12:41 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fej1ar$k1o$1@news.service.uci.edu>
Source record: 35783

```
Cecil Moore wrote:
> Jim Kelley wrote:
>
>> I've heard that believing in undetected phenomena can be a wonderful
>> way to pass the time. :-)
>
>
> Could have made a hero out of someone who predicted
> RF waves before they were detected.

Usually just makes for good fantasy writers.

ac6xg
```

2150. Re: NEC-4 output file format questions?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 17:17:05 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <fej1ehdkq1@news.jpl.nasa.gov>
Source record: 35788

4nec2 wrote:
> If I remember correctly, position of the X-, Y- and Z-coordinates and
> magnitudes/phase for the near-field data in the output file differ one
> to three charcter-positions.
>
> Arie.
>

You're right... just compared NEC4 vs Nec2DXS

Here's NEC2 output (you'll have to unwrap it)
- LOCATION - - EX - -
EY - - EZ -
X Y Z MAGNITUDE PHASE
MAGNITUDE PHASE MAGNITUDE PHASE
METERS METERS METERS VOLTS/M DEGREES
VOLTS/M DEGREES VOLTS/M DEGREES
-10.0000 0.0000 0.0000 0.0000E+00 0.00
0.0000E+00 0.00 1.4577E-01 89.07
1234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890
1234567890
-5.0000 0.0000 0.0000 0.0000E+00 0.00
0.0000E+00 0.00 2.2855E-01 156.88
0.0000 0.0000 0.0000 0.0000E+00 0.00
0.0000E+00 0.00 8.7109E+00 180.00

And NEC4

- LOCATION - - EX -
- EY - - EZ -
X Y Z MAGNITUDE PHASE
MAGNITUDE PHASE MAGNITUDE PHASE
METERS METERS METERS VOLTS/M DEGREES
VOLTS/M DEGREES VOLTS/M DEGREES
1234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890
1234567890
-10.0000 0.0000 0.0000 0.0000E+00 0.00
0.0000E+00 0.00 1.4577E-01 89.09
-5.0000 0.0000 0.0000 0.0000E+00 0.00
0.0000E+00 0.00 2.2854E-01 156.89
0.0000 0.0000 0.0000 0.0000E+00 0.00
0.0000E+00 0.00 8.7108E+00 180.00

It looks like the coordinates are each 1 character longer
X ends at 14 for N4, vs 13 for N2
Y ends at 26 for N4 vs 24 for N2

Z ends at 38 for N4 vs 35 for N2
The EX,EY,EZ appear to be the same width, so for N4 they start 3
characters farther over...

(Now I understand why my Matlab output file parser screwed up... Thanks,
Arie!)

2151. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 17:19:49 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <d10qg3hkvscspl1ubqoo21l1mt3d75uuqm@4ax.com>
Source record: 35782

On Tue, 09 Oct 2007 02:16:37 -0000, Frnak McKenney
<frnak@far.from.the.madding.crowd.com> wrote:

>Am I asking too much?

Hi Frnak,

Judging by the questions and responses, I would have to say "Yes."

To this point you haven't exactly demonstrated you have a problem,
just a complaint of a signal of poor quality to a human's perception.
For the clock itself, that complaint is arguably weak.

Let's just examine the evidence for the problem: There is none!

You have a clock that has 100mS resolution, and yet you have never
said how much it is off. 100mS? 1S? 10S? 1 minute? 1 Hour? All,
or any part of any of these metrics?

As Reggie would have chimed in at this point "If you can't measure it
and express it with a quantifiable, then you don't know anything."

Of course, your only source of accurate information is the one you are
suggesting has a problem. It probably doesn't have a problem, but
then how does one use this source's accuracy to check itself? You
would need a second clock to check it, and we would be hearing your
complaint in stereo.

I've calibrated time standards to the nearest 100nS and it is
accomplished at one sitting, no need for total connectivity such as
you might imagine (unless the clock you have is especially crappy).

Your clock has a resolution of 0.1 second. There are roughly 1
million ticks of the display in a day. A simple XTAL oscillator at 10
MHz would exhibit 50ppm stability and in a day wander up to 0.5
second. The next day it might wander back, the day following it might
slip below by 0.5 second. You would be hard pressed to confirm this
with over the air matching to the strike of the WWV gong - except if
the clock is especially crappy (and it could be). The same XTAL might
also exhibit an absolute error of 50ppm and accumulate time error.
This would be far more noticeable over the course of a week (you could
confirm the error by listening to time announcements - but you have
been silent to this issue).

These worst case errors all presume that the internal circuitry cannot
over the course of 24 hours manage to pull out one of 1400
synchronizing opportunities to phase lock out the error. These
circuits are generally optimized to accomplish just this (they work

fine in watches with a 60KHz signal after all). Your clock may be especially crappy (but that is unlikely).

The clock synchronizing circuits don't have to listen to the bandwidth of noise you hear, the speaker is for your convenience, not the clock's. I am sure that it works fine with only 1 LED lit - this is not a case of "can you hear me now?"

73's
Richard Clark, KB7QHC

2152. Re: Protection from birds

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 17:29:29 UTC
From: Alan Peake <adpeake@killspam.internode.on.net>
Message-ID: <470D0BF9.8030206@killspam.internode.on.net>
Source record: 35773

> It is a 200 Ohm antenna.
So it is. Anyway, the question arose as I'd never seen anything other than 50 ohms used for the balun.
Anyway, I spent all day on the 8 baluns (4 for 432 MHz and 4 for 144 MHz) and did as Owen suggested - put 1" PE irrigation pipe over the baluns. Let's see the little so-and-sos eat through that!!
Alan

2153. Re: Cheap n Easy Dipole Supports

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 17:37:06 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99C56C0514174HuckleberryREMOVEbig@198.186.192.196>
Source record: 35784

>> Ive had my Dipole tween two trees for years now. Next door always
>> been rented and Mine has been there since the previous Owner let me
>> hang it up there. Well the recent renters Hacked the cord. And I
>> dont know the current owner. So I must do somthing in my yard.
>> Except I can only go into one corner and it slopes pretty quick down
>> about 8 feet at the end.
>>
>> I can come up the fence about 15 feet to gain it back.
>>
>>
>> But what im looking for is a cheap way to hang the dipole end back
>> up.

I'm not sure how cheap you wish to stay, but I would suggest a couple 10' stackable sections of 1"dia steel masts as often available at hardwware stores' TV sections. (I think some Radio Shacks carry them, too, but haven't see the 10' ones in some time there.) They are strong, light, and I don't think they cost that much. Certainly easier to work with than wood, will have less visual impact, and will probably put much less strain on the fence post where you mount it.

Ed K7AAT

2154. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 17:47:08 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <we8Pi.661357$p47.616870@bgtnsc04-news.ops.worldnet.att.net>
Source record: 35785

art wrote:
> On 9 Oct, 19:35, John Smith <assemblywiz...@gmail.com> wrote:
>> art wrote:
>>> www.newswise.com/articles/view/532935
>> Yeah, ole' Robert Vincent is a sore spot in the NG, I'd imagine. Made
>> A$$'es out of all the "experts" and continues to do so ... sometimes
>> there is real justice.
>>
>> Regards,
>> JS
>
> Yup, the experts were not experts after all just phony's.
> Ofcourse we now have to wait for comments like " I knew that all the
> time",
> "I have been using that method for years", "that was invented by
> Mantovani
> a hundred yeard ago but he just didn't get around to printing it"
> Art
>

The patent, US 7187335, is a real hoot. I especially like the part where he describes doubling the bandwidth by adding a parasitic winding intertwined with the base coil helix.

Do you suppose his antenna is in equilibrium? Could proper application of Artsian-Gaussian theory improve it even more?

:D

73,
Gene
W4SZ

2155. Re: Cheap n Easy Dipole Supports

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 17:50:24 UTC
From: mcalhoun@ksu.edu
Message-ID: <fej3d0$ikm@unix1.cc.ksu.edu>
Source record: 35786

>>> Ive had my Dipole tween two trees for years now. Next door always
>>> been rented and Mine has been there since the previous Owner let me
>>>....[snip]....

>I'm not sure how cheap you wish to stay, but I would suggest a couple
>10' stackable sections of 1"dia steel masts as often available at
>....[snip]....

In the USA, Home Depot (and presumably Lowe's, etc.) sells 10- to 20-foot
lengths of pipe for the top "rail" of chain-link fences. Sometimes it
even has the swaging that allows one to fit in the end of another.
Remember that all such pipe masts will need guying.
--
--Myron A. Calhoun.
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
NRA Life Member & Certified Instructor for Rifle, Pistol, & Home Firearm Safety
Also Certified Instructor for the Kansas Concealed-Carry Handgun (CCH) license

2156. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 18:05:26 UTC
From: "Green Xenon [Radium]" <glucegen1@excite.com>
Message-ID: <470d11cb$0$32517$4c368faf@roadrunner.com>
Source record: 35787
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.antenna

K7ITM wrote:

> Why do you say that "UHFs tend to the best for extremely long distance
> reception"? Have a look at the basic equation governing line-of-sight
> reception.

Lower frequencies are absorbed by charged particles. Ionized zones [such as Earth ionosphere and the heliosphere around the solar system] tend to block low-frequency radio waves. That is why UHF is the best.

UHFs are the ï¿½sweet-spotï¿½ of radio waves. They are high-frequency-enough not to be attenuated by objects that block longer-wave radio signals and low-frequency-enough not to be attenuated by objects that block infrared rays.

> Why do you not answer your own question? It sounds to me like as
> reasonable a premise for a science fiction book as many that have been
> successful. You could perhaps spin it into quite an interesting
> story. You've already started with a premise that's so far from -- so
> very, very far from -- the current realities or even the dreams of
> people designing receivers that you may as well suppose you're going
> to receive whatever your wildest imagination might come up with.
> Since there is a nearly countless number of stars in the known
> universe, and since a large percentage of them could be planetary
> systems, each with the possibility of emitting interesting amplitude
> modulated carriers, your choices are pretty near limitless. Wow! Let
> your imagination run wild. It obviously did when you posed the
> question; you may as well let it run as wild with the answer. Back to
> you, Nonex!

Okay, I will let my imagination run wild.

I would hear scary stuff on the space stationï¿½s radio.

I used to often play my Nintendo when it was connected to channel 3. However, I was change the TV channel to 4. I could see the video of the game but it was fuzzy and covered in grains. The music of the game was absent, and instead was filled with frightening-yet-enjoyable tones [sounding like a buzzer, lawn mower, or electric shaver] along with a faint audio of what was being discussed on the channel 4 news.

I would hear something similar on my 2 GHz AM DX receiver in space.

Also, whenever there is drill or an actually emergency, the Emergency Alert System [EAS] plays their music. First they play the boring low-pitch square-wave tones. Then they play the high-pitched,

terrifying, enjoyable, psychedelic sine-wave tones.

I would also hear something similar to the second higher-pitched set of EAS tones on my 2 GHz AM DX receiver in space but not the 1st lower pitched tones. The lower-pitched 1st tones donï¿½t at all resemble what I would hear on the AM receiver.

In addition, I would hear sounds that are similar to the following terrifying-yet-enjoyable tones present on this keyboardï¿½s 100 sound tone back:

http://concertmate.evenement0.net/img/concertmate_realistic_concertmate-450_img1.jpg

#75 ï¿½cosmic soundï¿½ when the volume is at maximum

#76 ï¿½telephoneï¿½ when the volume is at minimum and I press keys from the 7th black key [from the left] or lower. If any key that is right of the 7th black key is pressed, the sound is totally different and will not even remotely resemble anything I would hear on the AM receiver.

#81 ï¿½marimbaï¿½ when the volume is at minimum and I press the lowest or highest key separately ï¿½ especially if I first press the lowest key, then let go, and then immediately press the highest key afterwards.

#85 ï¿½afro percussionï¿½ when the volume is at maximum and I smoothly slide my hand from lowest to highest note and then highest to lowest note or if I play notes two or more notes with one no higher than the 7th black key from the left and the other note no lower than the 10th key from the right. Actually any combinations of this tone will resemble what I would hear on my 2 GHz receiver.

#96 ï¿½bass/pianoï¿½ when the volume is at maximum and I press the lowest key.

All the sounds I hear on the receiver are those that result from the radio waves emitted by the magnetic fields of objects in the distant cosmos -- such as magnetars. At times, when the magnetic objects cause magnetic vibrations at an RF-rate, they cause radio waves to be generated. If the rates include 2-billions-vibrations-per-second, then my receiver will demodulate the 2 GHz parts and I can hear the signals -- provided that the demodulations result in frequencies anywhere from 20 to 20,000 Hz [the human hearing range].

> Oh, and by the way, "spamming" comes, in one form, from posting too
> many places; I've trimmed off a whole bunch of groups for this reply.
> By my way of thinking, you're being pretty generous with yourself
> saying you don't spam.

I only posted to relevant NGs.

2157. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 18:27:05 UTC
From: "Green Xenon [Radium]" <glucegen1@excite.com>
Message-ID: <470d16df$0$26390$4c368faf@roadrunner.com>
Source record: 35789
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.antenna

Green Xenon [Radium] wrote:

> I used to often play my Nintendo when it was connected to channel 3.
> However, I was change the TV channel to 4. I could see the video of the
> game but it was fuzzy and covered in grains. The music of the game was
> absent, and instead was filled with frightening-yet-enjoyable tones
> [sounding like a buzzer, lawn mower, or electric shaver] along with a
> faint audio of what was being discussed on the channel 4 news.
>
> I would hear something similar on my 2 GHz AM DX receiver in space.

Obviously excluding the "channel 4 news" part. F--k!!! I just hate when
I accidentally post stuff I didn't intend to!!!!!

2158. Re: Stand offs for ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 18:51:41 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <2b9Pi.2122$IE2.1434@newssvr22.news.prodigy.net>
Source record: 35790

Ed G wrote:
> w5dxp wrote:
>> I used 6" plastic electric fence standoffs.
>
> Cecil, How did you fasten them to the 1" dia. steel mast?

Of course, they are designed to be used with steel
pile-driven fence posts so I drilled holes and used
large UV-resistant tie-wraps to attach them to the
tower sections. It worked well.
--
73, Cecil http://www.w5dxp.com

2159. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 18:53:16 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <vc9Pi.2123$IE2.575@newssvr22.news.prodigy.net>
Source record: 35591

Ed Cregger wrote:
> You too will grow old someday, ...

... and forget to click the send button only once? :-)
--
73, Cecil http://www.w5dxp.com

2160. Re: New state of matter discovered! was Re: RFI Question for HF mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 18:55:34 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Ee9Pi.2124$lE2.1979@newssvr22.news.prodigy.net>
Source record: 35592

Michael Coslo wrote:
> Just kidding! I'm trying to get on-topic for this group.. ;^)

If it has to do with the medium through which amateur
radio RF signals propagate, it is not off topic. :-)
--
73, Cecil http://www.w5dxp.com

2161. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 19:06:40 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <3p9Pi.2126$IE2.1388@newssvr22.news.prodigy.net>
Source record: 35593
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

oriel36 wrote:
> To borrow from Galileo again -

Think we have learned anything since Galileo?
Have you ever read, "Flatland"?

> Look,I have no axe to grind and if you wish to believe the cobblers of
> the last century ...

I said in my last posting that I don't accept any
of the popular theories. IMO, every theory of the
universe that I have ever read is wrong in certain
areas. I know why an ever-expanding universe collapses
on itself in the long run. I am not aware of any popular
theory that explains that (apparent) contradiction.
--
73, Cecil http://www.w5dxp.com

2162. Re: Recommendation sought: Handheld transceiver for 2 meters (& maybe 70 cm)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 19:08:02 UTC
From: <>
Message-ID: <part1of1.1.Av5QJLdszPH7Hg@ue.ph>
Source record: 35595

Steve <sdaniel13@speakeasy.net> wrote:
>I'm looking to purchase one new. Have looked over the ones available
>at Universal, especially the Icom and Kenwood models, but would like
>to hear from folks who have experience with them (or others). Will
>consider a dual bander as well. Decent audio would be nice!
>
>Thanks,
>

I have two dual banders, Yeasu FT60 and Kenwood D7A. I like the Kenwood best.
Has built in TNC but is a little pricey. Capable of APRS which is why I like it.

Have fun
73
>Steve

----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

2163. Re: NEC-4 output file format questions?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 19:08:27 UTC
From: oeguet@gmx.de
Message-ID: <1192043307.137367.182110@d55g2000hsg.googlegroups.com>
Source record: 35594

Jim,

near-field data and NH/NE cards will be anyway not yet supported
(optimized) at the moment. I looked into the data records and found,
that they would be acceptable to my smart parser and it would not
cause any problems.
But I found another items on NEC-4 output data, that could cause
unpredictable results. These differencies have to be implemented and
could support on the next version of NEC Engine Booster.

Thanks for your help,
Aziz

2164. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 19:14:32 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <sw9Pi.2127$lE2.76@newssvr22.news.prodigy.net>
Source record: 35596

Jim Kelley wrote:
> Usually just makes for good fantasy writers.

Ever see the Star Trek episode about the the
starship that was traveling at 99% of the speed
of light between solar systems during the time
that warp-6 drive was invented and their great-
great-grand-children were waiting for them when
they arrived? :-) Or was that a Robert A. Heinlein
Novel?
--
73, Cecil http://www.w5dxp.com

2165. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 19:35:43 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fej9n4sqp1@news.service.uci.edu>
Source record: 35597

Cecil Moore wrote:
> I know why an ever-expanding universe collapses
> on itself in the long run.

Perhaps. But I'll bet you don't know how it does it. :-)

ac6xg

2166. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 19:52:27 UTC
From: oriel36 <kelleher.gerald@gmail.com>
Message-ID: <1192045947.139063.326530@k79g2000hse.googlegroups.com>
Source record: 35598
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

On Oct 10, 8:06 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> oriel36 wrote:
> > To borrow from Galileo again -
>
> Think we have learned anything since Galileo?
> Have you ever read, "Flatland"?
>

I have read that wonderful sci-fi novel from the 19th century -

"'Scientific people,' proceeded the Time Traveller, after the pause
required for the proper assimilation of this, 'know very well that
Time is only a kind of Space. "

http://www.bartleby.com/1000/1.html

So,you believe in a 1905 relativistic concept whoes conclusions match
those which could be found in any sci-fi bookshelf in 1898 !.I suppose
you cannot make the correlation between the dates of 1898 and 1905 but
then again,no person should need to.

So Cecil,go enjoy the epilogue of Well's fictional 'Time Machine'
novel,close the book and don't go believing in the flatlanders of
Albert except as an uproarious formal extension of the narrative -

http://www.bartleby.com/173/31.html

Maybe you would like to base geology on Verne's 'Journey To The
Center Of The Earth' but I think you at least know by now where I
stand and I leave you to your own devices.

> > Look,I have no axe to grind and if you wish to believe the cobblers of
> > the last century ...
>
> I said in my last posting that I don't accept any
> of the popular theories. IMO, every theory of the
> universe that I have ever read is wrong in certain
> areas. I know why an ever-expanding universe collapses
> on itself in the long run. I am not aware of any popular
> theory that explains that (apparent) contradiction.
> --
> 73, Cecil http://www.w5dxp.com

2167. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 19:53:32 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <_4aPi.1852$wF3.496@nlpi061.nbdc.sbc.com>
Source record: 35599

Jim Kelley wrote:
> Perhaps. But I'll bet you don't know how it does it. :-)

It wouldn't surprise me if the "how" was
time flowing backwards - you wake up a
day younger than you were yesterday. :-)
--
73, Cecil http://www.w5dxp.com

2168. Antenna/RF Analyzers anything other than MFJ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 20:07:13 UTC
From: yea right <spam@spam.spam>
Message-ID: <pan.2007.10.10.20.07.12.559620@spam.spam>
Source record: 35600

I've been looking to *up* my ham radio experience by constructing a few projects. Though I have a few toys already, (Spec analyzer, sweep gen scope) I've been looking at purchasing an RF analyzer. I am looking for something that can easily scope out resonant circuits, antennas and measure impedance and reactance.

The MFJ series seems dominate in the market but does not cover all the freq ranges I'm interested in. I've found a company called Autek Research who seems to make a few continuous analyzers but find very little about them on google.

Are there any other companies making RF analyzers?

Is there something that MFJ has that others lack?

Is Autek Research OK?

I Thank You in advance!

2169. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 20:11:10 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <xlaPi.2135$wF3.285@nlpi061.nbdc.sbc.com>
Source record: 35601
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

oriel36 wrote:
> "'Scientific people,' proceeded the Time Traveller, after the pause
> required for the proper assimilation of this, 'know very well that
> Time is only a kind of Space. "

I agree. I think time, like universal expansion,
is an illusion akin to a religion. I tend to agree
with Julian Barbour in, "The End Of Time".

What we experience as a "passing-of-time event",
is only a change whose probability function has
collapsed. The past is *where* (not when) all
probability functions have collapsed. The future
is *where* (not when) no probability functions have
collapsed. Time, after all, is only a physical
dimensional *change* in the rotation of the earth
and/or in earth's orbit around the sun.

IMO, time is no more real than the Sun-God riding
his chariot across the sky every day. Any equation
that contains a time term needs to take that into
account.
--
73, Cecil http://www.w5dxp.com

2170. Re: Antenna/RF Analyzers anything other than MFJ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 20:15:58 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <0qaPi.2225$wF3.2190@nlpi061.nbdc.sbc.com>
Source record: 35602

yea right wrote:
> Are there any other companies making RF analyzers?

Check out the AIM 4170 at:

http://arraysolutions.com/Products/AIM4170.htm#top%20of%20page
--
73, Cecil http://www.w5dxp.com

2171. Re: Stand offs for ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 20:30:17 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99C58961BDDDHuckleberryREMOVEbig@64.209.0.81>
Source record: 35605

Cecil Moore <nospam@w5dxp.com> wrote in news:2b9Pi.2122$lE2.1434
@newssvr22.news.prodigy.net:

> Ed G wrote:
> > w5dxp wrote:
>>> I used 6" plastic electric fence standoffs.
>>
>> Cecil, How did you fasten them to the 1" dia. steel mast?
>
> Of course, they are designed to be used with steel
> pile-driven fence posts so I drilled holes and used
> large UV-resistant tie-wraps to attach them to the
> tower sections. It worked well.

Thanks. I can do that.

Ed

2172. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 20:30:43 UTC
From: Benj <bjacoby@iwaynet.net>
Message-ID: <1192048243.669350.304230@d55g2000hsg.googlegroups.com>
Source record: 35604
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

Cecil Moore wrote:
> oriel36 wrote:
> > "'Scientific people,' proceeded the Time Traveller, after the pause
> > required for the proper assimilation of this, 'know very well that
> > Time is only a kind of Space. "

> IMO, time is no more real than the Sun-God riding
> his chariot across the sky every day. Any equation
> that contains a time term needs to take that into
> account.

Of course this is all true. However, to primitive earthlings viewing the daily progress of the sun across the sky the chariot theory is perfectly sane and real. That IS how it appears to the earth observer. Same for time.

For argument assume that all possible events and actions and the progression between them all is laid out in some huge matrix. In that sense all this structure is only "a kind of space". Now imagine a consciousness that has a certain velocity and is capable of experiencing the matrix in a very narrow viewpoint much as a needle plays a phonograph record. That needle has followed a certain path up to the point where it presently is. That path is fixed and unalterable. What it did, it did! Where the needle is right now is in fact, experienced as 'now". But the path that the needle might take is open to choice (free will) and that new path would be termed the future. The needle doesn't skip around so choices DO have consequences of things you must "go through" if you choose a certain "path".

If you take flatland to the next level, what you observe is that higher dimensions manifest themselves in the lower dimensions as time! So if you were to take a viewpoint high above the matrix observing a consciousness inscribing it's path through life, to you you'd see all "parallel universes" plus the past that was taken, plus what was being experienced "now" as well as the possible choices for the future. Given some input, you probably could even estimate the most probable future path to be chosen.

But of course none of this answers the most important question which is what do 2 GHz AM signals in space sound like? I believe the answer is that they sound just like the Venusian signals Adamski received from the beamships right before they appeared!

2173. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 20:31:47 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fejd0a$2sj$1@news.service.uci.edu>
Source record: 35607

Cecil Moore wrote:
> IMO, time is no more real than the Sun-God riding
> his chariot across the sky every day.

And as real as the sweep of an electron beam across a CRT.

> Any equation
> that contains a time term needs to take that into
> account.

Can you provide an example of how that would be done?

ac6xg

2174. OT: Sci-Fi space radio imagination gone wild -- what I would hear on a 2 GHz AM DX receiver in space.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 20:35:58 UTC
From: "Green Xenon [Radium]" <glucegen1@excite.com>
Message-ID: <470d351e$0$24320$4c368faf@roadrunner.com>
Source record: 35603
Cross-posted to: sci.astro.amateur,sci.astro,alt.astronomy,rec.radio.amateur.space,uk.sci.astronomy,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

K7ITM wrote in
http://groups.google.com/group/rec.radio.amateur.space/msg/29d5341be8ff65fe
:

> Why do you say that "UHFs tend to the best for extremely long distance
> reception"? Have a look at the basic equation governing line-of-sight
> reception.

Lower frequencies are absorbed by charged particles. Ionized zones [such
as Earth ionosphere and the heliosphere around the solar system] tend to
block low-frequency radio waves. That is why UHF is the best.

UHFs are the ï¿½sweet-spotï¿½ of radio waves. They are high-frequency-enough
not to be attenuated by objects that block longer-wave radio signals yet
low-frequency-enough not to be attenuated by objects that block SHFs [3
GHz to 30 GHz range], EHFs [30 GHz to 300 GHz range], THz-radiation, or IR.

> Why do you not answer your own question? It sounds to me like as
> reasonable a premise for a science fiction book as many that have been
> successful. You could perhaps spin it into quite an interesting
> story. You've already started with a premise that's so far from -- so
> very, very far from -- the current realities or even the dreams of
> people designing receivers that you may as well suppose you're going
> to receive whatever your wildest imagination might come up with.
> Since there is a nearly countless number of stars in the known
> universe, and since a large percentage of them could be planetary
> systems, each with the possibility of emitting interesting amplitude
> modulated carriers, your choices are pretty near limitless. Wow! Let
> your imagination run wild. It obviously did when you posed the
> question; you may as well let it run as wild with the answer. Back to
> you, Nonex!

Okay, I will let my imagination run wild.

I would hear scary stuff on the space stationï¿½s radio.

I used to often play my Nintendo when it was connected to channel 3.
However, I was change the TV channel to 4. I could see the video of the
game but it was fuzzy and covered in grains. The music of the game was
absent, and instead was filled with frightening-yet-enjoyable tones
[sounding like a buzzer, lawn mower, or electric shaver] along with a
faint audio of what was being discussed on the channel 4 news.

I would hear something similar on my 2 GHz AM DX receiver in space.
Obviously excluding the "channel 4 news" part.

Also, whenever there is drill or an actually emergency, the Emergency
Alert System [EAS] plays their music. First they play the boring
low-pitch square-wave tones. Then they play the high-pitched,
terrifying, enjoyable, psychedelic sine-wave tones.

I would also hear something similar to the second higher-pitched set of
EAS tones on my 2 GHz AM DX receiver in space but not the 1st lower
pitched tones. The lower-pitched 1st tones donï¿½t at all resemble what I
would hear on the AM receiver.

In addition, I would hear sounds that are similar to the following
terrifying-yet-enjoyable tones present on this keyboardï¿½s 100 sound tone
back:

http://concertmate.evenement0.net/img/concertmate_realistic_concertmate-450_img1.jpg

#75 ï¿½cosmic soundï¿½ when the volume is at maximum

#76 ï¿½telephoneï¿½ when the volume is at minimum and I press keys from the
7th black key [from the left] or lower. If any key that is right of the
7th black key is pressed, the sound is totally different and will not
even remotely resemble anything I would hear on the AM receiver.

#81 ï¿½marimbaï¿½ when the volume is at minimum and I press the lowest or
highest key separately ï¿½ especially if I first press the lowest key,
then let go, and then immediately press the highest key afterwards.

#85 ï¿½afro percussionï¿½ when the volume is at maximum and I smoothly slide
my hand from lowest to highest note and then highest to lowest note or
if I play notes two or more notes with one no higher than the 7th black
key from the left and the other note no lower than the 10th key from the
right. Actually any combinations of this tone will resemble what I would
hear on my 2 GHz receiver.

#96 ï¿½bass/pianoï¿½ when the volume is at maximum and I press the lowest key.

All the sounds I hear on the receiver are those that result from the
radio waves emitted by the magnetic fields of objects in the distant
cosmos -- such as magnetars. At times, when the magnetic objects cause
magnetic vibrations at an RF-rate, they cause radio waves to be
generated. If the rates include 2-billions-vibrations-per-second, then
my receiver will demodulate the 2 GHz parts and I can hear the signals
-- provided that the demodulations result in frequencies anywhere from
20 to 20,000 Hz [the human hearing range].

> Oh, and by the way, "spamming" comes, in one form, from posting too
> many places; I've trimmed off a whole bunch of groups for this reply.
> By my way of thinking, you're being pretty generous with yourself
> saying you don't spam.

I only posted to relevant NGs.

2175. Re: OT: Sci-Fi space radio imagination gone wild -- what I would hear on a 2 GHz AM DX receiver in space.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 20:38:03 UTC
From: Benj <bjacoby@iwaynet.net>
Message-ID: <1192048683.141242.314300@v3g2000hsg.googlegroups.com>
Source record: 35606
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

Green Xenon [Radium] SPAMMED:
> K7ITM wrote in
> > Oh, and by the way, "spamming" comes, in one form, from posting too
> > many places; I've trimmed off a whole bunch of groups for this reply.
> > By my way of thinking, you're being pretty generous with yourself
> > saying you don't spam.
>
> I only posted to relevant NGs.

Google groups only allows cross-posting to FIVE newsgroups. Anyone
posting to more than 5 groups is a stupid SPAMMER in my book and that
includes YOU. MORON.

And Why just an AM signal? How about a 2 GHz FM signal?

2176. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 21:31:22 UTC
From: ecregger <ecregger@bellsouth.net>
Message-ID: <qwbPi.1188$L7.106@bignews3.bellsouth.net>
Source record: 35608

I'm just trying to be helpful, not a wiseguy. Although it does seem that my genetics predispose me to lean in that direction. <G>

Ed, NM2K

"keithm" <vk1zkm@yahoo.com> wrote in message news:470bf852$1@dnews.tpgi.com.au...
> Since he said previously that he could hardly hear the tones/voice, isn't
> it probable that the receiver is just seeing mostly noise?
>
> As mentioned by someone else, propagation is currently "very ordinary"
> (aka poor) at present, so maybe he's just out of range.
>
> KeithM
> VK1ZKM
>
> "ecregger" <ecregger@bellsouth.net> wrote in message
> news:BzROi.3400$s8.1633@bignews3.bellsouth.net...
>>
>> "Owen Duffy" <none@no.where> wrote in message
>> news:Xns99C53CAD89459nonenowhere@61.9.191.5...
>>> Denny <k8do@mailblocks.com> wrote in news:1191956444.157030.11580@
>>> 22g2000hsm.googlegroups.com:
>>>
>>>> The other issue is whether your clock is actually able to synch with
>>>> the WWV signal... You may have a defect in the clock... It would seem
>>>> that 4 or 5 bars should have done the trick...
>>>
>>> Presumably the LED meter indicates recieved power, not signal to noise
>>> ratio.
>>>
>>> Owen
>>
>>
>> --------
>>
>>
>> That's good!
>>
>> Polarization was one of my thoughts.
>>
>> Also, how is the synch tone derived by the receiver? Maybe that part of
>> the radio needs tweaking? One would think that seven segments out of ten
>> should be sufficient. I'm assuming there are ten segments total.
>>

>> Ed, NM2K
>>
>

2177. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 21:32:50 UTC
From: ecregger <ecregger@bellsouth.net>
Message-ID: <PxbPi.1189$L7.910@bignews3.bellsouth.net>
Source record: 35609

<G>

New computer, new software and fasciculations. What a combo!

Ed, NM2K

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:vc9Pi.2123$lE2.575@newssvr22.news.prodigy.net...
> Ed Cregger wrote:
>> You too will grow old someday, ...
>
> ... and forget to click the send button only once? :-)
> --
> 73, Cecil http://www.w5dxp.com

2178. Space Weather

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 21:36:03 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <_JmdnTmNpaJf2JDanZ2dnUVZ_q6hnZ2d@comcast.com>
Source record: 35610

Space Weather News for Oct. 10, 2007
http://spaceweather.com

CELESTIAL TRIANGLE: Set your alarm. For the next five mornings, just before dawn banishes the night, you can see a compact celestial triangle rising in the eastern sky. The corners are dazzling Venus, Saturn and the bright star Regulus. This is worth waking up for--at least once. Visit http://spaceweather.com for sky maps and more.

AURORA WATCH: A solar wind stream is heading for Earth and it may spark a geomagnetic storm when it arrives on Oct. 11th or 12th. High-latitude sky watchers should be alert for auroras.

2179. Re: Antenna/RF Analyzers anything other than MFJ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 22:33:31 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <%qcPi.4101$ln.3450@trnddc07>
Source record: 35611

"yea right" <spam@spam.spam> wrote in message
news:pan.2007.10.10.20.07.12.559620@spam.spam...
> I've been looking to *up* my ham radio experience by constructing a few
> projects. Though I have a few toys already, (Spec analyzer, sweep gen
> scope) I've been looking at purchasing an RF analyzer. I am looking for
> something that can easily scope out resonant circuits, antennas and
> measure impedance and reactance.
>
> The MFJ series seems dominate in the market but does not cover all the
> freq ranges I'm interested in. I've found a company called Autek Research
> who seems to make a few continuous analyzers but find very little about
> them on google.
>
> Are there any other companies making RF analyzers?
>
> Is there something that MFJ has that others lack?
>
> Is Autek Research OK?
>
>
> I Thank You in advance!

Hi "yea"

I dont have experience with HF RF analyzers. But, I communicate with a
Dutch guy who has alot of good comparison data on analyzers on his site
http://homepages.ipact.nl/~pa1are/.

Jerry

2180. Re: Cheap n Easy Dipole Supports

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 23:17:35 UTC
From: "R. Scott" <lintardspamtrap@scotts-home.net>
Message-ID: <ceidnbZb15bzwJDanZ2dnUVZ_uLinZ2d@comcast.com>
Source record: 35612

> In the USA, Home Depot (and presumably Lowe's, etc.) sells 10- to 20-foot
> lengths of pipe for the top "rail" of chain-link fences. Sometimes it
> even has the swaging that allows one to fit in the end of another.
> Remember that all such pipe masts will need guying.

thats the down side, because of Lot orientation I canna do guys.

2181. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-10 23:58:16 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13gqpoor046tr14@corp.supernews.com>
Source record: 35613

Denny,

Thanks for joining in.

On Tue, 09 Oct 2007 12:00:44 -0700, Denny <k8do@mailblocks.com> wrote:
> On Oct 9, 6:06 am, n...@wt.net wrote:
>> On Oct 8, 9:16 pm, Frnak McKenney
>>
>> <fr...@far.from.the.madding.crowd.com> wrote:
>>
>> > Is it possible that I'm picking up a non-WWV dignal so strong that
>> > it's masking WWV? I tried tuning around 10MHz with a shortwave
>> > radio; it didn't find WWV ...
--snip--
>> Sounds like it's being masked by some type of noise,
>> but this could just be from the signal being very weak.
>> If you can hear other stations ok, it probably the propagation
>> more than anything. Being that you can barely hear it on a
>> regular receiver seems to bear this out.
--snip--

>Even with my antennas on a 150 foot tower there are times of day
>when WWV at 10 megacycles is not audible... This is just the way
>the daily propagation cycle is at 30 meters.

Grumph! (but the 150' tower impresses me! <grin!>)

>My best advice is to put up a dipole for 30 meters, even if you have
>to bend the ends to make it fit your space...

Well, a halfwave 30m dipole comes out to... 49 feet?

I went back and checked the NIST "Time and Frequency Services" PDF
file. According to this, WWV-10MHz comes off "half-wave vertical
antennas that radiate omnidirectional patterns."

Maybe I can wind my two 24.5' wires into vertical-axis helices?
<grin!>

> ... A horizontal dipole
>being balanced picks up less vertically polarized noise than
>vertical antennas... Getting the wire outdoors will help also...
>You are likely picking up lots of humm and buzz inside the building
>from various electrical and electronic devices...

Not sure what you could be referring to... other than the three
computers, 25" monitor, printer, Atmel AVR development board (8MHz

clock), flourescent desk lamp, and overhead I-look-like-an-
incandescent flourescent helix... all within 3 feet of the antenna
and clock. <grin!>

>The other issue is whether your clock is actually able to synch with
>the WWV signal... You may have a defect in the clock... It would
>seem that 4 or 5 bars should have done the trick...

If it _never_ sync-ed I'd be strongly leaning toward your way of
thinking. In the past, with a "dangling wire" antenna, it has
occasionally taken months to get in sync; with my two loops I've
managed to get it in sync three times (IIRC) in the past two weeks.
(If I were still rational on the subject, I'd just admit that I
have seen improvement -- all the way from "completely
undependable" to "approaching acceptable" -- even if it's not quite
as much as I'd hoped for.)

Thanks again.

Frank
--
The cure for boredom is curiosity. There is no cure for
curiosity. --Ellen Parr
--
Frank McKenney, McKenney Associates
Richmond, Virginia / (804) 320-4887
Munged E-mail: frank uscore mckenney ayut minds pring dawt cahm (y'all)

2182. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 00:00:44 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13gqptcfriu28ab@corp.supernews.com>
Source record: 35614

Owen,

Thanks for the comments.

On Tue, 09 Oct 2007 19:58:10 GMT, Owen Duffy <none@no.where> wrote:
>Denny <k8do@mailblocks.com> wrote in news:1191956444.157030.11580@
>22g2000hsm.googlegroups.com:
>> The other issue is whether your clock is actually able to synch with
>> the WWV signal... You may have a defect in the clock... It would seem
>> that 4 or 5 bars should have done the trick...
>
>Presumably the LED meter indicates recieved power, not signal to
>noise ratio.

Exactly. It's an LED bargraph driven by pin 9 on the TDA1072A chip;
according to the data sheet that's the "Field strength indicator
output", a log-scale output driven by the internal AGC amplifier.

I got a clearer WWV signal the other day and was able to re-tune my
antenna. It turns out that the "loud signal" I was tuning to wasn't
WWV, just some random RF I was overloading my poor clock with. The
bargraph now sits down at 1-2 LEDs most of the time, although I did
see a "bursty" period this morning where it went up to 3-5 LEDs.

The WWV audio was coming and going on about a five-second interval:
louder (almost clear), then softer (almost to disappearing), then
louder again. "Wow", so to speak. <grin!>

Ah, well. Maybe in my Copious Free Time I'll replace the MAC-II's
87C52 with something I understand, like an AVR, and program it _my_
way. (Oh. Then _I_ get the support calls. ... Ack!)

Frank
--
"Curiosity is one of the permanent and certain characteristics
of a vigorous mind. -- Dr. Samuel Johnson
--
Frank McKenney, McKenney Associates
Richmond, Virginia / (804) 320-4887
Munged E-mail: frank uscore mckenney ayut minds pring dawt cahm (y'all)

2183. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 00:03:54 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13gqq3a4ad2kk63@corp.supernews.com>
Source record: 35615

On Oct 8, 9:16 pm, Frnak McKenney <fr...@far.from.the.madding.crowd.com> wrote:
>>I'm in Richmond, Virginia and I'm trying to noticeably improve my
>>reception of WWV's 10MHz signal from Fort Collins, Colorado. ...

On Tue, 09 Oct 2007 22:22:07 GMT, Rick <ricknj10@hotmail.com> wrote:
>I am in New Jersey. Propagation from Colorado to here is probably
>similar to Virginia.
>
>This morning, Tues, 10/9, I listened to WWV on 10 MHz with the 4
>antennas I have at my disposal to see what kind of signal level I
>get.
>
>My antennas are 80 meter and 40 meter dipoles, a 20 meter yagi and a
>30 meter dipole, all at about 50 feet.
>
>On the first 3 antennas WWV runs about S6-9, and on the 30 meter
>dipole it is 10-20 db over 9.
>
>This evening, 6 pm, the first 3 antennas haul WWV in at S9 and the
>30 m dipole has it at a rock solid 30 over.
>
>So I agree with the advice you got to string up some kind of dipole
>and throw out that loop, there is plenty of signal, you just have to
>go get it.

Okay, Rick, you've convinced me. The heck with Oklahoma! (Sorry,
MH.) I'm running my antenna line to New Jersey! <grin!>

If I've sounded reluctant to put an antenna up in the attic, it's
partly that I'm reluctant to drill holes through walls and ceilings
to run the antenna cable without at least _some_ assurance that the
results would be worth it... and partly that I'm just reluctant to
drill holes, spackle, and paint. I suppose I could run the line
through the attic hatch door rim and down the hallway ceiling...

>PS may I throw in a little commercial for my pet peeve? As you read
>this did you notice that I did not include any text from previous
>posts? Did you miss it?

Well, yes. The original post was a bit long and should have been
trimmed as appropriate, but a couple of lines (see above) would have
made things a little clearer to some poor soul who ran across the
post in isolation.

In any case, thanks for the feedback. Let's see... 300 miles of
10-Base2 cable...

Frank
--
"Our souls may lose their peace and even disturb other people's,
if we are always criticizing trivial actions -- which often are
not real defects at all, but we construe them wrongly through
our ignorance of their motives..." -- Teresa of Avila
--
Frank McKenney, McKenney Associates
Richmond, Virginia / (804) 320-4887
Munged E-mail: frank uscore mckenney ayut minds pring dawt cahm (y'all)

2184. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 00:06:11 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13gqq7j462p6ke4@corp.supernews.com>
Source record: 35616

Robert,

Thank you for joining in.

On Tue, 09 Oct 2007 22:35:29 -0700, Robert Smts <bob@rsmits.ca> wrote:
>Frnak McKenney wrote:
>> I'm in Richmond, Virginia and I'm trying to noticeably improve my
>> reception of WWV's 10MHz signal from Fort Collins, Colorado. It all
>> seemed so simple, two weeks ago: wind some wire, solder a
>> connector, and Hey...presto! a clean WWV signal. <grin!>
--snip--

>Frank, can't you erect anything outside at all? A 10 metre dipole,
>is after all, only about 5 metres long. And if you can't do that,
>what kind of attic do you have? If your house is oriented
>correctly, you could even build a three element wire yagi pointed
>west inside the attic.

Um... 10m? I was hoping for 10MHz/30m. Or have I missed
something? (Wouldn't surprise me -- my 1st Class ticket expired
several decades back.)

Okay... ARRL Antennas, Chapter 8: Multielement Arrays. We've got
an (approximately, given skip) vertically-polarized 10MHz signal, so
the E-field is moving up and down and the wavefront is a circular
ripple (nearly a straight line by the time it gets to Richmond)
travelling roughly west-to-east, that is, it's hitting my house
end-on.

>Dimensions shouldn't be that critical for receive only, and space
>the elements at about 2.5 metres. Basically one element at about 47
>feet, one at about 49.3 feet, and one at about 45 feet. Split the
>47 ft one into two, feed it directly with 50 ohm coax, one side to
>the shield, one to the centre conductor, and you have a three
>element wire beam pointed, hopefully, west. (Put the longest
>element on the east side, the shortest on the west.)

Um... if I label them as A/47ft, B/49ft, and C/45ft, the picture I
come up with looks like this from overhead:

```
| | |
| | |
<--- To Fort Collins | + |
| + |
| | |
| | |
(scale)
```

```
|.........................................C.A.B
```

I definitely think I'm missing something, but then, I haven't really
made it that far into the Antenna Handbook.

Anyway, thanks for the suggestion.

Frank
--
"Our Constitution is in actual operation; everything appears to
promise that it will last; but in this world nothing is certain
but death and taxes." -- Benjamin Franklin
--
Frank McKenney, McKenney Associates
Richmond, Virginia / (804) 320-4887
Munged E-mail: frank uscore mckenney ayut minds pring dawt cahm (y'all)

2185. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 00:09:08 UTC
From: gsm@mendelson.com
Message-ID: <slrnfgqq8b.l97.gsm@cable.mendelson.com>
Source record: 35617

Frnak McKenney wrote:
> Not sure what you could be referring to... other than the three
> computers, 25" monitor, printer, Atmel AVR development board (8MHz
> clock), flourescent desk lamp, and overhead I-look-like-an-
> incandescent flourescent helix... all within 3 feet of the antenna
> and clock. <grin!>

With all that hardware, wouldn't NTP (internet time) be a better option? Or if you are not too deep into steel and concrete a GPS receiver?

Geoff.
--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

2186. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 00:14:09 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192061649.186678.84040@d55g2000hsg.googlegroups.com>
Source record: 35618

On 10 Oct, 10:47, Gene Fuller <W4SZzzz...@att.net> wrote:
> art wrote:
> > On 9 Oct, 19:35, John Smith <assemblywiz...@gmail.com> wrote:
> >> art wrote:
> >>>www.newswise.com/articles/view/532935
> >> Yeah, ole' Robert Vincent is a sore spot in the NG, I'd imagine. Made
> >> A$$'es out of all the "experts" and continues to do so ... sometimes
> >> there is real justice.
>
> >> Regards,
> >> JS
>
> > Yup, the experts were not experts after all just phony's.
> > Ofcourse we now have to wait for comments like " I knew that all the
> > time",
> > "I have been using that method for years", "that was invented by
> > Mantovani
> > a hundred yeard ago but he just didn't get around to printing it"
> > Art
>
> The patent, US 7187335, is a real hoot. I especially like the part where
snip>
> Do you suppose his antenna is in equilibrium? Could proper application
> of Artsian-Gaussian theory improve it even more?
>
> :D
>
> 73,
> Gene
> W4SZ- Hide quoted text -
>
> - Show quoted text -

Gene, you are just showing your ignorance of physics.
What is it about the word "equilibrium" that you can't understand?
How on earth can you say you are educated in physics?
How is it that you do not have an understanding of Gauss?
Or are you trying to be funny with the word "Artisian-Gaussian"
like the rest of your fellow school boys?
What manner of man are you trying to project of yourself to other
readers of this group, a comedian or an ignoramous or somebody with
senior moments in
continuos series? You never seem to have anything to say that is
informative so why the need to draw attention to yourself.

What is missing in your life such that you have to mimic a fool that
want's to be funny in the absence of a education of any sort?
Back to the Vincent antenna, he has designed an antenna that is
shorter
than that known before. You didn't come up with it he did. He has a
patent
based on his claims and not for the introductory writing.An engineer
in automobiles
has shown interest in it where you have never gained outside interests
in any thing
you have done in your life time. The input impedance is an advantage
over similar antennas
and at the same time not requiring a ground plain without being a
problem to the transmitter.
He is also radiating well in comparison to the height of antenna and
the
radiating system has the appearance of being efficient. Vincent has
come up with something new
and because of the 'not invented in my backyard' you want to diminish
his achievements.
But you can't diminish his achievments without providing an
engineering analysis
and for that you do not have the necessary education.
Maybe it is better that you continue to mimic a fool that wants to be
funny but
better to become a succes at that at home before showing off your
skills in public
even tho you are getting laughter, not with you but at you.
Art
Art

2187. Re: Cheap n Easy Dipole Supports

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 00:16:10 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99C5AFAD98970HuckleberryREMOVEbig@64.209.0.90>
Source record: 35619

"R. Scott" <lintardspamtrap@scotts-home.net> wrote in
news:ceidnbZb15bzwJDanZ2dnUVZ_uLinZ2d@comcast.com:

>> In the USA, Home Depot (and presumably Lowe's, etc.) sells 10- to
>> 20-foot lengths of pipe for the top "rail" of chain-link fences.
>> Sometimes it even has the swaging that allows one to fit in the end
>> of another. Remember that all such pipe masts will need guying.
>
>
> thats the down side, because of Lot orientation I canna do guys.
>

Have you considered a couple rigid steel tube supports on the inside?

2188. Re: Antenna/RF Analyzers anything other than MFJ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 00:46:53 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1192063613.759655.244040@v3g2000hsg.googlegroups.com>
Source record: 35620

On Oct 10, 1:07 pm, yea right <s...@spam.spam> wrote:
> I've been looking to *up* my ham radio experience by constructing a few
> projects. Though I have a few toys already, (Spec analyzer, sweep gen
> scope) I've been looking at purchasing an RF analyzer. I am looking for
> something that can easily scope out resonant circuits, antennas and
> measure impedance and reactance.
>
> The MFJ series seems dominate in the market but does not cover all the
> freq ranges I'm interested in. I've found a company called Autek Research
> who seems to make a few continuous analyzers but find very little about
> them on google.
>
> Are there any other companies making RF analyzers?
>
> Is there something that MFJ has that others lack?
>
> Is Autek Research OK?
>
> I Thank You in advance!

By all means, check out Paul Kiciak's web pages at http://n2pk.com/.
That relatively inexpensive project yields a serious network
analyzer. There are lurkers here (and probably more that read
rec.radio.amateur.homebrew) that have built it and can give you first-
hand info about it. If I didn't already have an HP analyzer and
access to others, I'd have built one long ago.

Cheers,
Tom

2189. Re: Cheap n Easy Dipole Supports

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 02:28:32 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <de6dnTaCAtKiF5DanZ2dnUVZ_hWdnZ2d@giganews.com>
Source record: 35621

W7PSK wrote:
> Ive had my Dipole tween two trees for years now. Next door always
> been rented and Mine has been there since the previous Owner let me
> hang it up there. Well the recent renters Hacked the cord. And I
> dont know the current owner. So I must do somthing in my yard.
> Except I can only go into one corner and it slopes pretty quick down
> about 8 feet at the end.
>
> I can come up the fence about 15 feet to gain it back.
>
>
> But what im looking for is a cheap way to hang the dipole end back up.
>
>
> I have some room on the other tree to pull it back to make up the 15
> feet I'd lose that way.
>
>
> Thanks
> Scotty W7PSK.

Hi Scotty,

When reconfiguring my sloping single-wire 80m dipole into a 4-wire cage inverted vee, I made use of the corner posts of my chainlink fence. I found the ID to be about 2.05" and slipped two 10' sections of 1-1/2" iron pipe (about 1.91" OD) into & attached-to each of the fence posts. One corner post is short (about 3' above ground) and the other is taller (about 6' above ground). I use conduit couplings to join the sections, since they engage more of the threads on the pipe as compared to water pipe couplings. It hasn't been up very long but, so far, so good. If you want to know how well it holds up, ask me after the Winter storms!

73,
Bryan WA7PRC

2190. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 03:49:25 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fek6g8dml1@news.albasani.net>
Source record: 35622

Gene Fuller wrote:

> ...
> The patent, US 7187335, is a real hoot. I especially like the part where
> he describes doubling the bandwidth by adding a parasitic winding
> intertwined with the base coil helix.
>
> Do you suppose his antenna is in equilibrium? Could proper application
> of Artsian-Gaussian theory improve it even more?
>
> :D
>
> 73,
> Gene
> W4SZ

What? You don't see cutting the capacitance between winding turns as causing some measurable effect which in turn affects a property of the antenna proper?

Thicker conductor(s) usually means a measurable gain in bandwith, with a parasitic element in such close proximity to the major element, a gain in bandwidth is not that difficult to propose and attempt to prove/disprove.

Regards,
JS

2191. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 03:51:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fek6jvdml2@news.albasani.net>
Source record: 35623

art wrote:

> ...
> What was the error? The antenna feed line is part of the antenna
> system is it not?
> If it radiates then what is the problem?
> Art
> Art

I have a 1/4 wave counterpoise available to the 1/2 DLM I am using.
However, I have a high value choke to ward off radiation from the coax ...

Regards,
JS

2192. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 04:15:48 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192076148.122446.66390@k79g2000hse.googlegroups.com>
Source record: 35624

On 10 Oct, 20:51, John Smith <assemblywiz...@gmail.com> wrote:
> art wrote:
>
> > ...
>
> > What was the error? The antenna feed line is part of the antenna
> > system is it not?
> > If it radiates then what is the problem?
> > Art
> > Art
>
> I have a 1/4 wave counterpoise available to the 1/2 DLM I am using.
> However, I have a high value choke to ward off radiation from the coax ...
>
> Regards,
> JS

What is wrong with the coax radiating?
Art

2193. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 04:31:22 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fek8ut$u9a$1@news.albasani.net>
Source record: 35625

art wrote:

> ...
> What is wrong with the coax radiating?
> Art

Personally, my major complaint is in the "lack of control" over antenna performance/operating characteristics.

For instance, with the feed-line allowed to radiate, movement/placement of the coax tends to affect SWR, radiation pattern(s), etc.--sometimes dramatically. This is very undesirable, at least to me, in a mobile/field-day/camping/etc. antenna ...

Regards,
JS

2194. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 04:42:07 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fek9j2$u9a$2@news.albasani.net>
Source record: 35627

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20071010005200&newsLang=en

JS

2195. Re: OT: Sci-Fi space radio imagination gone wild -- what I would hear on a 2 GHz AM DX receiver in space.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 04:48:42 UTC
From: bob <nospam@nospam.com>
Message-ID: <470dab13$0$47110$892e7fe2@authen.yellow.readfreenews.net>
Source record: 35628
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

"Green Xenon [Radium]" <glucegen1@excite.com> wrote in message
news:470da918$0$32518$4c368faf@roadrunner.com...
> On Oct 10, 1:38 pm, Benj <bjac...@iwaynet.net> wrote in
> http://groups.google.com/group/sci.physics/msg/251e17b76b147438 :
>
> > Why just an AM signal? How about a 2 GHz FM signal?
>
> Because AM is more receptive of weak and distant RF signals produced by
> magnetic objects far out in the cosmos. FM is immune to such interference
> which is why FM is commonly used for wireless analog audio devices -- such
> as audio component of analog television signals as well as analog cell
> phones. If these devices used AM, they would be full of the
> terrifying-yet-enjoyable sounds I described. These sounds are distracting
> because of the emotional response to them. It hinders the users from
> talking on the cell phone or enjoying their favorite show. The listeners
> get terrified of the sounds. The cosmic magnetic audio disturbances on AM
> radio cause listeners to enter a dissociative psychological state. While
> this maybe pleasurable, it can also be extremely frightening.

you getting this crap from a comic book?

> FM was invented to prevent listeners from experiencing such nightmarish
> trances. FM audio does hiss when the station is too weak or signal is lost
> but there are no mind-altering sounds -- like those on the AM radio --
> that would disrupt the emotional stability of the listeners. This is
> because most cosmically-occurring magnetically-induced RF signals are
> amplitude-modulated in nature. Hence they are received on the AM frequency
> which the receiver resonates at.

no they are not,

AM has at a minimum 60% of its power in the carrier.

> As I've said before, UHFs are the sweet-spot of radio waves. They are
> high-frequency-enough not to be attenuated by objects that block

2 gigs is NOT UHF, comic book guy.

> longer-wave radio signals yet low-frequency-enough not to be attenuated by
> objects that block SHFs [3 GHz to 30 GHz range], EHFs [30 GHz to 300 GHz
> range], THz-radiation, or IR. This makes UHF frequencies more
> vulnerable -- than other bands -- to cosmically-occurring
> magnetically-induced RF signals.
>

> I chose 2 GHz because:
>
> A. UHF is between 300 MHz to 3 GHz

Wrong

flush rest of poo

2196. Re: OT: Sci-Fi space radio imagination gone wild -- what I would hear on a 2 GHz AM DX receiver in space.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 04:50:34 UTC
From: "Green Xenon [Radium]" <glucegen1@excite.com>
Message-ID: <470da918$0$32518$4c368faf@roadrunner.com>
Source record: 35626
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

On Oct 10, 1:38 pm, Benj <bjac...@iwaynet.net> wrote in
http://groups.google.com/group/sci.physics/msg/251e17b76b147438 :

> Why just an AM signal? How about a 2 GHz FM signal?

Because AM is more receptive of weak and distant RF signals produced by magnetic objects far out in the cosmos. FM is immune to such interference which is why FM is commonly used for wireless analog audio devices -- such as audio component of analog television signals as well as analog cell phones. If these devices used AM, they would be full of the terrifying-yet-enjoyable sounds I described. These sounds are distracting because of the emotional response to them. It hinders the users from talking on the cell phone or enjoying their favorite show. The listeners get terrified of the sounds. The cosmic magnetic audio disturbances on AM radio cause listeners to enter a dissociative psychological state. While this maybe pleasurable, it can also be extremely frightening.

FM was invented to prevent listeners from experiencing such nightmarish trances. FM audio does hiss when the station is too weak or signal is lost but there are no mind-altering sounds -- like those on the AM radio -- that would disrupt the emotional stability of the listeners. This is because most cosmically-occurring magnetically-induced RF signals are amplitude-modulated in nature. Hence they are received on the AM frequency which the receiver resonates at.

As I've said before, UHFs are the ï¿½sweet-spotï¿½ of radio waves. They are high-frequency-enough not to be attenuated by objects that block longer-wave radio signals yet low-frequency-enough not to be attenuated by objects that block SHFs [3 GHz to 30 GHz range], EHFs [30 GHz to 300 GHz range], THz-radiation, or IR. This makes UHF frequencies more vulnerable -- than other bands -- to cosmically-occurring magnetically-induced RF signals.

I chose 2 GHz because:

A. UHF is between 300 MHz to 3 GHz
B. 3 GHz minus 300 MHz = 2700000000 or 2.7 GHz
C. 2700000000/2 = 1350000000 or 1.35 GHz
D. 1.35 GHz + 300 MHz = 1650000000 or 1.65 GHz
E. Round 1.65 GHz to 1.7 GHz
F. Round 1.7 GHz to 2 GHz

That's why I chose 2 GHz.

2197. Re: OT: Sci-Fi space radio imagination gone wild -- what I would hear on a 2 GHz AM DX receiver in space.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 05:38:51 UTC
From: "Green Xenon [Radium]" <glucegen1@excite.com>
Message-ID: <470db46b$0$32520$4c368faf@roadrunner.com>
Source record: 35629
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

On Oct 10, 9:48 pm, "bob" <nos...@nospam.com> wrote
http://groups.google.com/group/sci.physics/msg/3ab5ed0f5e8fb66d :

> "Green Xenon [Radium]" <gluceg...@excite.com> wrote in
messagenews:470da918$0$32518$4c368faf@roadrunner.com...
>

> > As I've said before, UHFs are the ï¿½sweet-spotï¿½ of radio waves.
> > They are
> > high-frequency-enough not to be attenuated by objects that block
>
> 2 gigs is NOT UHF, comic book guy.
>
> > longer-wave radio signals yet low-frequency-enough
> > not to be attenuated by
> > objects that block SHFs [3 GHz to 30 GHz range],
> > EHFs [30 GHz to 300 GHz
> > range], THz-radiation, or IR. This makes UHF frequencies more
> > vulnerable -- than other bands -- to cosmically-occurring
> > magnetically-induced RF signals.
>
> > I chose 2 GHz because:
>
> > A. UHF is between 300 MHz to 3 GHz
>
> Wrong

http://en.wikipedia.org/wiki/Uhf

"Ultra high frequency (UHF) designates a range (band) of electromagnetic
waves whose frequency is between 300 MHz and 3 GHz, which is 300 MHz to
3,000 MHz."

Clearly this includes 2 GHz.

2198. Re: OT: Sci-Fi space radio imagination gone wild -- what I would hear on a 2 GHz AM DX receiver in space.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 05:49:05 UTC
From: "Green Xenon [Radium]" <glucegen1@excite.com>
Message-ID: <470db6eb$0$16445$4c368faf@roadrunner.com>
Source record: 35630
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

On Oct 10, 9:48 pm, "bob" <nos...@nospam.com> wrote:

> "Green Xenon [Radium]" <gluceg...@excite.com> wrote in
messagenews:470da918$0$32518$4c368faf@roadrunner.com...
>

> > On Oct 10, 1:38 pm, Benj <bjac...@iwaynet.net> wrote in
> >http://groups.google.com/group/sci.physics/msg/251e17b76b147438:

> > > Why just an AM signal? How about a 2 GHz FM signal?

> > Because AM is more receptive of weak and distant RF
> > signals produced by
> > magnetic objects far out in the cosmos. FM is immune
> > to such interference
> > which is why FM is commonly used for wireless analog
> > audio devices -- such
> > as audio component of analog television signals
> > as well as analog cell
> > phones. If these devices used AM, they would be full of the
> > terrifying-yet-enjoyable sounds I described.
> > These sounds are distracting
> > because of the emotional response to them. It hinders the users from
> > talking on the cell phone or enjoying their favorite show.
> > The listeners
> > get terrified of the sounds. The cosmic magnetic audio
> > disturbances on AM
> > radio cause listeners to enter a dissociative psychological
> > state. While
> > this maybe pleasurable, it can also be extremely frightening.

> you getting this crap from a comic book?

No. It's much more complicated than that.

My birthdate is 10-22-83. On the end of December of '89 -- around a week
before Christmas -- I experienced a blow to my head that cause me to
feel like I was in a different universe. I was playing basketball in my
school, I ran after the ball trying to catch it, but instead hit my head
on a metal pole [used to hold a tetherball].

My symptoms because much worse after January of '90. The symptoms ended
in the end of May of '91. Ironically, the headache was not severe and
only lasted about a day after the injury.

The symptoms were mostly psychological but very frightening. Strangely, they were scary and enjoyable at the same time.

Here were my symptoms:

1. Paroxysmal dissociative states

2. Flashbacks of my house in Stamford, Connecticut [which my parents and I moved out in July of '86]

3. Abnormal dreams consisting of Stamford, the sun suddenly losing its light [causing the sky to go dark], as well as sounds emitted by electronic devices [such the interference on the AM radio and heterodyne tones], and computer error messages.

4. Obsession with outer space, magnetism, as well as the strange sounds emitted by electronic equipment. I used to often play my Nintendo when it was connected to channel 3. However, I was change the TV channel to 4. I could see the video of the game but it was fuzzy and covered in grains. The music of the game was absent, and instead was filled with frightening-yet-enjoyable tones [sounding like a buzzer, lawn mower, or electric shaver] along with a faint audio of what was being discussed on the channel 4 news. I would get so scared, yet I would enjoy it. I would get scared when I saw computer error messages -- especially if I knew they were resulting from some remote network issues -- yet I would enjoy it too. My dad's PC used Windows 3.0 at the time and had a dial-up internet connection. There were often errors on this PC when I used it. These errors related to some distant malfunction. Again, this was pleasurable and scary for me at the same time.

5. Whenever I would change or look at the settings on the TV, I would often see the inside my Stamford home. Particularly the "CATV" sign caused me to see into the hallway and one of the bedrooms in my Stamford home.

6. At night, the sounds of the dogs barking would really scare me -- for no reason. I'd have to plug my ears and close all the windows [to soften the barks] in order to be in peace. I would also get similarly scared -- again, only at night -- when the lights of passing cars reflected off the walls of my rooms, so I would always close the curtains to block the car lights.

7. On the school bus, I would feel disconnected and terrified when the CB radio emitted sounds consisting of radio-frequency interferences.

8. I got a score of -- out of what, I don't remember -- on my spelling test. When I looked at the '5', pictures of my Stamford home began to flicker in my eyes.

9. Paroxysmal Out-of-body experiences

10. Paroxysmal Visual and auditory hallucinations

11. Paroxysmal periods where my sense of time would be shortened dramatically -- 5 hour felt like 5 minutes.

12. Panic attacks

13. Trance-like states

From Jan of '90 to May of '91, my world was filled with these terrifying-yet-enjoyable symptoms.

On 9-9-90, I had probably one of the most strange and scary symptoms. I was fully awake yet I got the feeling that I was going to start dreaming. It was the feeling I usually get if I wake up in the middle of the night and then experience sleep paralysis. There is a strange feeling I will usually get [a warning] before sleep paralysis sets in and I start to dream -- usually in the form of nightmares. I can't remember what happened on 9-9-90 after the 'warning'. I do know that there was no paralysis.

I didn't tell my family about this head injury until recently. I didn't think it was that important. The day of the injury, I had a mild-headache and experienced mild versions of the about 13 symptoms. However, the pain was gone, the next day. Hence, being the naive kid I was, thought that it wasn't of concern. The 13 symptoms also temporarily subsided after the next day, however, it re-surfaced tremendously as New Years approached. At Jan of '90 an onwards it became emotionally-unbearable for me. Finally ending in May of '91.

2199. Re: OT: Sci-Fi space radio imagination gone wild -- what I would hear on a 2 GHz AM DX receiver in space.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 06:27:28 UTC
From: Benj <bjacoby@iwaynet.net>
Message-ID: <1192084048.106549.82450@19g2000hsx.googlegroups.com>
Source record: 35631
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

Green Xenon [Radium] wrote:

> > you getting this crap from a comic book?
>
> No. It's much more complicated than that.
>
> My birthdate is 10-22-83. On the end of December of '89 -- around a week
> before Christmas -- I experienced a blow to my head that cause me to
> feel like I was in a different universe. I was playing basketball in my
> school, I ran after the ball trying to catch it, but instead hit my head
> on a metal pole [used to hold a tetherball].
>
> My symptoms because much worse after January of '90. The symptoms ended
> in the end of May of '91. Ironically, the headache was not severe and
> only lasted about a day after the injury.
>
> The symptoms were mostly psychological but very frightening. Strangely,
> they were scary and enjoyable at the same time.
>
> Here were my symptoms:
>
> 1. Paroxysmal dissociative states
>
> 2. Flashbacks of my house in Stamford, Connecticut [which my parents and
> I moved out in July of '86]
>
> 3. Abnormal dreams consisting of Stamford, the sun suddenly losing its
> light [causing the sky to go dark], as well as sounds emitted by
> electronic devices [such the interference on the AM radio and heterodyne
> tones], and computer error messages.
>
> 4. Obsession with outer space, magnetism, as well as the strange sounds
> emitted by electronic equipment. I used to often play my Nintendo when
> it was connected to channel 3. However, I was change the TV channel to
> 4. I could see the video of the game but it was fuzzy and covered in
> grains. The music of the game was absent, and instead was filled with
> frightening-yet-enjoyable tones [sounding like a buzzer, lawn mower, or
> electric shaver] along with a faint audio of what was being discussed on
> the channel 4 news. I would get so scared, yet I would enjoy it. I would
> get scared when I saw computer error messages -- especially if I knew
> they were resulting from some remote network issues -- yet I would enjoy
> it too. My dad's PC used Windows 3.0 at the time and had a dial-up

> internet connection. There were often errors on this PC when I used it.
> These errors related to some distant malfunction. Again, this was
> pleasurable and scary for me at the same time.
>
> 5. Whenever I would change or look at the settings on the TV, I would
> often see the inside my Stamford home. Particularly the "CATV" sign
> caused me to see into the hallway and one of the bedrooms in my Stamford
> home.
>
> 6. At night, the sounds of the dogs barking would really scare me -- for
> no reason. I'd have to plug my ears and close all the windows [to soften
> the barks] in order to be in peace. I would also get similarly scared --
> again, only at night -- when the lights of passing cars reflected off
> the walls of my rooms, so I would always close the curtains to block the
> car lights.
>
> 7. On the school bus, I would feel disconnected and terrified when the
> CB radio emitted sounds consisting of radio-frequency interferences.
>
> 8. I got a score of -- out of what, I don't remember -- on my spelling
> test. When I looked at the '5', pictures of my Stamford home began to
> flicker in my eyes.
>
> 9. Paroxysmal Out-of-body experiences
>
> 10. Paroxysmal Visual and auditory hallucinations
>
> 11. Paroxysmal periods where my sense of time would be shortened
> dramatically -- 5 hour felt like 5 minutes.
>
> 12. Panic attacks
>
> 13. Trance-like states
>
> From Jan of '90 to May of '91, my world was filled with these
> terrifying-yet-enjoyable symptoms.
>
> On 9-9-90, I had probably one of the most strange and scary symptoms. I
> was fully awake yet I got the feeling that I was going to start
> dreaming. It was the feeling I usually get if I wake up in the middle of
> the night and then experience sleep paralysis. There is a strange
> feeling I will usually get [a warning] before sleep paralysis sets in
> and I start to dream -- usually in the form of nightmares. I can't
> remember what happened on 9-9-90 after the 'warning'. I do know that
> there was no paralysis.
>
> I didn't tell my family about this head injury until recently. I didn't
> think it was that important. The day of the injury, I had a
> mild-headache and experienced mild versions of the about 13 symptoms.
> However, the pain was gone, the next day. Hence, being the naive kid I

> was, thought that it wasn't of concern. The 13 symptoms also temporarily
> subsided after the next day, however, it re-surfaced tremendously as New
> Years approached. At Jan of '90 an onwards it became
> emotionally-unbearable for me. Finally ending in May of '91.

Whoa! Well this explains a LOT! The hard part of this kind of thing
is to be able to carefully separate extrasensory reality from pure
imagination. Tesla, you may recall suffered from similar symptoms his
whole life. Ended in 91? Judging from you posts it's not over yet.

2200. Re: OT: Sci-Fi space radio imagination gone wild -- what I would hear on a 2 GHz AM DX receiver in space.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 07:07:34 UTC
From: bob <nospam@nospam.com>
Message-ID: <470dcb9e$0$47136$892e7fe2@authen.yellow.readfreenews.net>
Source record: 35632
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag

"Green Xenon [Radium]" <glucegen1@excite.com> wrote in message
news:470db6eb$0$16445$4c368faf@roadrunner.com...
> On Oct 10, 9:48 pm, "bob" <nos...@nospam.com> wrote:
>
> > "Green Xenon [Radium]" <gluceg...@excite.com> wrote in
> messagenews:470da918$0$32518$4c368faf@roadrunner.com...
> > >
>
>

yep, I had the same thing once, try wrapping yourself up with duck tape,
leaving an inch or two for breath-ability, and stay that way for a few days.

I have never felt better when they took the tape off. Man, what a treatment.

2201. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 11:57:38 UTC
From: Jon Kåre Hellan <dev@null.com>
Message-ID: <1mwstt50el.fsf@persaunet.uninett.no>
Source record: 35633

gsm@mendelson.com (Geoffrey S. Mendelson) writes:

> Frnak McKenney wrote:
>> Not sure what you could be referring to... other than the three
>> computers, 25" monitor, printer, Atmel AVR development board (8MHz
>> clock), flourescent desk lamp, and overhead I-look-like-an-
>> incandescent flourescent helix... all within 3 feet of the antenna
>> and clock. <grin!>
>
> With all that hardware, wouldn't NTP (internet time) be a better option? Or if
> you are not too deep into steel and concrete a GPS receiver?

Sounds like OP is really interested in bringing his father's WWV clock
to life.

But if correct time is the objective, ntp is easy. Over the internet
it is supposed to be accurate to tens of milliseconds. On our network,
1 - 5 ms is typical, but I suppose it is quite well behaved.

A GPS intended for timing gives better than 100 ms accuracy off the
cable. It can discipline ntp on a computer to typically 1 - 10 us
accuracy.

It looks like the Garmin GPS 18lvc us the timing GPS of choice for
hobbyists. You need a pulse per second (PPS) signal. There are other
GPS dongles which don't have PPS on the plug, but you can find the signal on
the circuit board.

More info at TAPR: "http://www.tapr.org". See also the timekeepers
mailing list archive:
"http://fortytwo.ch/mailman/pipermail/timekeepers/".

John Ackerman N8UR is an authority on timing and ham radio.

But again - this is probably not what you're really after :-)

73
LA4RT Jon

2202. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 12:09:01 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13gs4itshfkgk5b@corp.supernews.com>
Source record: 35634

Geoff.,

Thanks for adding your comments.

On Wed, 10 Oct 2007 12:34:08 +0000 (UTC), Geoffrey S. Mendelson <gsm@mendelson.com> wrote:
> Frnak McKenney wrote:
>> Anyway, thanks for reassuring me that my poor WWV reception really
>> might not be due to a poor antenna design. If I ever come up with a
>> Really Good Solution I'll post back here.
>
>What would help you is an outdoor active antenna. For a start look at MFJ's.
>It's a metal box with an amplifier in it, and a whip antenna. It uses a
>small box at the receiver end to pass DC up the coax to power it.

I looked around and found http://www.mfjenterprises.com/
Their MFJ-1020C looks interesting.

For now, though, I think I want to concentrate on getting as much as
I can from "bare wire".

>Placing it outside would help. Placing it outside and away from noise
>sources, or on the roof would help more. A whip antenna is used because
>it's a cheap commerical off-the-shelf (COTS) item. It could be replaced
>with a thin wire. The coax could be replaced with a run of (more expensive)
>mini-coax. This would make it easier to hide and you may be able to use it.

The old GC-1000 had a built-in whip; the GCW-1001 doesn't even have
that... just a threaded 50ohm coax connector.

>If you are handy with building things, there are lots of designs for similar
>devices, the easiest is a single MMIC type amplfier. It may be more difficult
>to actually do as they are very sensitive to static.

I'll see what I can find. Thanks for the keyword.

>If all you have is a window, a loop around it would do. If it has a metal frame,
>and all 4 sides are connected to each other, you can try using it as a loop.
>If not, thin wire held up by transparent tape, or that metal tape used by
>alarm systems would work.

I like that -- there's a window/storm window about 4' away facing
east.

As to your other post...

On Thu, 11 Oct 2007 00:09:08 +0000 (UTC), Geoffrey S. Mendelson <gsm@mendelson.com> wrote:
> Frnak McKenney wrote:
>> Not sure what you could be referring to... other than the three

>> computers, 25" monitor, printer, Atmel AVR development board (8MHz
>> clock), flourescent desk lamp, and overhead I-look-like-an-
>> incandescent flourescent helix... all within 3 feet of the antenna
>> and clock. <grin!>
>
> With all that hardware, wouldn't NTP (internet time) be a better option? Or if
> you are not too deep into steel and concrete a GPS receiver?

Both of these would be excellent ways of keeping an accurate time source at hand, and it would be perfectly reasonable to assume that that was what I was trying to accomplish. I apologize for the lack of clarity; let me back up a bit.

When I started out, I simply wanted to learn about how antennas worked, how an EM wave made it from point A to point B in a way that would let me... how do I say it? "Fit all the pieces together"? And, as part of that, I was trying to see how well I could take basic principles and make-with-my-hands something that demonstrated that (a) I had understood correctly and that (b) I could actually build something that worked.

I'd had the MAC-II around for more than three years, sitting in the background and mildly annoying me because every power hiccup reset the display to its startup "not SEt" text and it could be months before it was running again. Mildly annoying, but I didn't have a serious need to know exactly what time it was.

It occurred to me (eventually <grin!>) that building An Antenna that made the MAC-II a more dependable TOD source would be a Really Good Test Of My Antenna Building Skills... sort of like learning to swim by jumping off a dock. As silly as that may sound, when you're venturing into unfamiliar territory (and as a consultant, I do a lot of that) there's always a new kind of swimming to learn, and there always seems to be a dock you eventually wind up jumping off if you're going to learn very much.

So if it looks like my "stroke" is extremely poor at this point, well, that's likely; on the other hand, I'm not exactly drowning, either. I'm waving my hands in all directions, learning what seems to make me move and what doesn't, and listening to helpful comments from the Peanut Gallery on the dock. Youse guys. <grin!>

Throwing money at the prob... er, "adopting a pre-packaged solution" <grin!> gets me the Time Of Day -- precise, reliable, hopefully accurate -- but it doesn't help me learn how to swim... er, build antennas. And, besides, my budget is a bit tight at this point, which means no new test equipment... I don't suppose anyone knows how to generate an accurate 10MHz alignment signal by rubbing a 1.5MHz Function Generator and a Tek465 'scope together? <grin!>

Okay... I'm sure that's more than most (all?) of you wanted to know. Please feel free to recycle this post in an environmentally

acceptable manner. <grin!>

Frank
--
"...in the end, it's simply about telling stories, in conditions
that allow me to do my best work. 'The exercise of vital powers
along lines of excellence in a life affording them scope,' to
quote the Greek definition of happiness."
-- J.M. Straczynski ("Babylon 5") on scriptwriting
--
Frank McKenney, McKenney Associates
Richmond, Virginia / (804) 320-4887
Munged E-mail: frank uscore mckenney ayut minds pring dawt cahm (y'all)

2203. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 12:12:14 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13gs4ours4f4ad9@corp.supernews.com>
Source record: 35635

On Wed, 10 Oct 2007 10:19:49 -0700, Richard Clark <kb7qhc@comcast.net> wrote:
> On Tue, 09 Oct 2007 02:16:37 -0000, Frnak McKenney
><frnak@far.from.the.madding.crowd.com> wrote:
>
>>Am I asking too much?
>
>Hi Frnak,
>
>Judging by the questions and responses, I would have to say "Yes."
>
>To this point you haven't exactly demonstrated you have a problem,
>just a complaint of a signal of poor quality to a human's perception.
>For the clock itself, that complaint is arguably weak.
>
>Let's just examine the evidence for the problem: There is none!
>
>You have a clock that has 100mS resolution, and yet you have never
>said how much it is off. 100mS? 1S? 10S? 1 minute? 1 Hour? All,
>or any part of any of these metrics?

It's hard to tell exactly how much the clock is off by.

Every time the power hiccups, or I have to move the MAC-II, or power
down the outlet the display switches to something like this (best
viewed with a fixed-width font):

```
_ _
_ _ /_ /_ /_ /_
/ / /_/ /_ _/ /_ /_
```

and it stays that way for weeks. Or months.

>As Reggie would have chimed in at this point "If you can't measure it
>and express it with a quantifiable, then you don't know anything."

Given the extent of my ignorance concerning 'most everything, that
seems likely. <grin!>

>Of course, your only source of accurate information is the one you are
>suggesting has a problem. It probably doesn't have a problem, but
>then how does one use this source's accuracy to check itself? You
>would need a second clock to check it, and we would be hearing your
>complaint in stereo.

Hm... I don't _think_ so. At least, I havent heard of any plans for
a High-Def upgrade to Usenet lately, but with Congress currently in
session I suppose anything is possible.

As for testing the clock's accuracy, you're right about needing a second source ("Qui custodiet ipsos custodes?" or something like that? <grin>). On the other hand, as long as the digits are flashing by, I'm happy to "just trust them".

>I've calibrated time standards to the nearest 100nS and it is
>accomplished at one sitting, no need for total connectivity such as
>you might imagine (unless the clock you have is especially crappy).
>
>Your clock has a resolution of 0.1 second. There are roughly 1
>million ticks of the display in a day. A simple XTAL oscillator at 10
>MHz would exhibit 50ppm stability and in a day wander up to 0.5
>second. The next day it might wander back, the day following it might
>slip below by 0.5 second.

If I read the MAC-II manual correctly, each time it "connects to WWV" (gets a recognizable signal) it calculates and saves an adjustment value. The front panel has two LEDs labelled "TRIM UP" and "TRIM DN" to indicate how well it's doing.

> ... You would be hard pressed to confirm this
>with over the air matching to the strike of the WWV gong - except if
>the clock is especially crappy (and it could be). The same XTAL might
>also exhibit an absolute error of 50ppm and accumulate time error.
>This would be far more noticeable over the course of a week (you could
>confirm the error by listening to time announcements - but you have
>been silent to this issue).

True. And, while I'm sure the _WWV_ announcer hasn't been silent, _I_ haven't heard anything comprehendable from him/her/it out of my MAC-II's speaker at any point in the past few weeks.

>These worst case errors all presume that the internal circuitry cannot
>over the course of 24 hours manage to pull out one of 1400
>synchronizing opportunities to phase lock out the error. These
>circuits are generally optimized to accomplish just this (they work
>fine in watches with a 60KHz signal after all). Your clock may be
>especially crappy (but that is unlikely).

Based on the feedback from other posters, it's likely a consequence of 10MHz propagation. A VLF RF signal like 60KHz reportedly does a much better job of getting a readable signal to a wide area.

>The clock synchronizing circuits don't have to listen to the bandwidth
>of noise you hear, the speaker is for your convenience, not the
>clock's. I am sure that it works fine with only 1 LED lit - this is
>not a case of "can you hear me now?"

No, but (assuming you're subbing for WWV <grin!>) it would be nice to know I was going to get a readable message from "you" more than once every couple of months. (Why do I hear the echo of my parents' frustration during my colege days? <grin!>)

Thanks for the feedback. I admit I hadn't thought that much about
the accuracy of the MAC-II; I'm afraid I've been too caught up in
simply trying to get digits instead of "error text" on the display.

Frank
--
"A good traveller has no fixed plans and is not intent on
arriving." -- Lao Tzu (570-490 BC)
--
Frank McKenney, McKenney Associates
Richmond, Virginia / (804) 320-4887
Munged E-mail: frank uscore mckenney ayut minds pring dawt cahm (y'all)

2204. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 12:19:01 UTC
From: gsm@mendelson.com
Message-ID: <slrnfgs50h.uvv.gsm@cable.mendelson.com>
Source record: 35636

Jon Kï¿½re Hellan wrote:
> Sounds like OP is really interested in bringing his father's WWV clock
> to life.
> But again - this is probably not what you're really after :-)

A totaly different approach occured to me when I found that there were no time signals readable here. WWV, CHU (if it is still around) and their European equivalents never seem to be readable here.

The 60 kHz WWV coverage map puts me almost a 1000 miles beyond the edge of their "weak but occasionaly useable" (my words) propigation. Someone on another list claims his clock syncs about 30 miles north and at sea level, but he never answered a question of too what and how often. :-(

What I thought of doing was sort of an radio to NTP interface. Access the time information via NTP and then modulate a signal with it. 10 mHz would be more difficult, you might be able to get 60kHz with a sound card, or something like it. Obviously, you would not need or want anything very strong and you may be able to couple it directly to the antenna socket.

I know it would be cheating, but it seems like a fun hardware/software project. You probably could get a magazine article published about it, and maybe even sell enough boards to to offset the cost of making them.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
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Visit my 'blog at http://geoffstechno.livejournal.com/

2205. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 13:23:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13gs8v44u8v4f57@corp.supernews.com>
Source record: 35637

Frnak McKenney wrote:
> . . .
> Okay... ARRL Antennas, Chapter 8: Multielement Arrays. We've got
> an (approximately, given skip) vertically-polarized 10MHz signal, so
> the E-field is moving up and down and the wavefront is a circular
> ripple (nearly a straight line by the time it gets to Richmond)
> travelling roughly west-to-east, that is, it's hitting my house
> end-on.
> . . .

> I definitely think I'm missing something, but then, I haven't really
> made it that far into the Antenna Handbook.

While you're looking at the ARRL Antenna Book, look over the chapter on propagation. You'll find that when receiving a signal by ionospheric skip (as you are), the polarization will be randomly oriented. So there's no point in choosing your antenna orientation on the basis of some supposed wave polarization. Its orientation will, however, have a striking impact on its pattern, so you should choose the orientation to get the most favorable pattern.

The fading in and out of the WWV signal you described in an earlier posting is very likely due largely or at least partially to polarization shift -- the signal fades when the polarization rotates to be crosswise to your antenna, and gets loud when the polarization lines up with your antenna's. I've seen tens of dB difference switching between a vertically and horizontally polarized antenna, with the change going the other way after a minute or so when the polarization rotates. If your receiver needs a constantly strong signal, you're going to have a hard time getting it what it needs.

I haven't followed the thread closely, so please pardon me if I've missed something. Your initial description of the problem sounded like receiver overload. A sharp preselector would help a lot, although it sounded like you were using a tuned loop which, if carefully balanced, should provide that function. If a preselector isn't enough, the next step is to add an attenuator -- I have to use one between my TV and its antenna, in fact. You should consider the possibility that the 10 MHz WWV signal itself is overloading the receiver, in which case an attenuator is necessary, and the last thing you'd want to do is use a better antenna. A directional antenna can be used to reduce the strength of interfering signals if they're coming from directions different than WWV. But making an antenna which has good rejection in the right directions can be something of a project.

Roy Lewallen, W7EL

2206. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 14:22:58 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <felbk7$6lf$1@news.albasani.net>
Source record: 35638

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

http://www.al.com/business/huntsvilletimes/index.ssf?/base/business/119209447785430.xml&coll=1

Regards,
JS

2207. Re: Stand offs for ladder line

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 14:36:03 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <470e34d3$0$15411$4c368faf@roadrunner.com>
Source record: 35639

"Ed G" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns99C4A1C22F3E8HuckleberryREMOVEbig@198.186.192.196...
>
> I have need to support some W7FG 600 ohm ladderline up a 20'tall, 1"
> diameter steel mast.
>
> Can anyone recommend either factory made, or home made means of
> providing such support for this situation?
>
> Thanks.
>
>
> Ed K7AAT
>

During field day we had a similar problem. meaal mast, supporting a long antenna fed with open wire line. Initial thought was that we would make brackets out of PVC pipe and tie wrap them to the mast. This woud require some fairly large and expensive PVC T connectors . Instead we purchased a few lengths of 3/4" Pvc pipe and made a second mast running paralell with the main mast to support the feedline.

Jimmie

2208. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 14:51:55 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gudsg39lcqmnvvbgh8nd8uq4uhfcjgohup@4ax.com>
Source record: 35640

On Thu, 11 Oct 2007 12:12:14 -0000, Frnak McKenney
<frnak@far.from.the.madding.crowd.com> wrote:

> _ _
> _ _ /_ /_ /_ /_
> / / /_/ /_ _/ /_ /_
>
>and it stays that way for weeks. Or months.
>

A whip antenna should be able to sort out WWV for at least one of 1400
synchronizing events in a day. This may be a problem of too much
antenna at one time - and a nearby lightning event at that same time.
Your front end got fried out.

73's
Richard Clark, KB7QHC

2209. Re: New state of matter discovered! was Re: RFI Question for HF mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 15:09:15 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <felear$16em$1@f04n12.cac.psu.edu>
Source record: 35541

Cecil Moore wrote:
> Michael Coslo wrote:
>> Just kidding! I'm trying to get on-topic for this group.. ;^)
>
> If it has to do with the medium through which amateur
> radio RF signals propagate, it is not off topic. :-)

Did you think I was being sarcastic, Cecil?

The medium brings much unwanted signal to my antenna in my car. Whether it is Art's particles, phlogiston, ether, intelligently designed thingies, or whatever, it isn't wanted.

- 73 de Mike KB3EIA -

2210. Re: New state of matter discovered! was Re: RFI Question for HF mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 15:57:49 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1192118269.283953.55200@y42g2000hsy.googlegroups.com>
Source record: 35542

The medium brings much unwanted signal to my antenna in my car.
Whether
it is Art's particles, phlogiston, ether, intelligently designed
thingies, or whatever, it isn't wanted.

And your point is?

2211. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 16:49:15 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <felk6bavu1@news.jpl.nasa.gov>
Source record: 35543

Jon Kï¿½re Hellan wrote:
> gsm@mendelson.com (Geoffrey S. Mendelson) writes:
>
>
>>Frnak McKenney wrote:
>>
>>>Not sure what you could be referring to... other than the three
>>>computers, 25" monitor, printer, Atmel AVR development board (8MHz
>>>clock), flourescent desk lamp, and overhead I-look-like-an-
>>>incandescent flourescent helix... all within 3 feet of the antenna
>>>and clock. <grin!>
>>
>>With all that hardware, wouldn't NTP (internet time) be a better option? Or if
>>you are not too deep into steel and concrete a GPS receiver?
>
>
> Sounds like OP is really interested in bringing his father's WWV clock
> to life.
>
> But if correct time is the objective, ntp is easy. Over the internet
> it is supposed to be accurate to tens of milliseconds. On our network,
> 1 - 5 ms is typical, but I suppose it is quite well behaved.
>
> A GPS intended for timing gives better than 100 ms accuracy off the
> cable. It can discipline ntp on a computer to typically 1 - 10 us
> accuracy.
>
> It looks like the Garmin GPS 18lvc us the timing GPS of choice for
> hobbyists. You need a pulse per second (PPS) signal. There are other
> GPS dongles which don't have PPS on the plug, but you can find the signal on
> the circuit board.
>
> More info at TAPR: "http://www.tapr.org". See also the timekeepers
> mailing list archive:
> "http://fortytwo.ch/mailman/pipermail/timekeepers/".
>
> John Ackerman N8UR is an authority on timing and ham radio.

Why not take the GPS disciplined oscillator (e.g. a Z8301) and use that
to synthesize a fake WWV signal (which you could program up in the AVR),
and radiate that to your MACII. You can easily divide down the 10 MHz
from the oscillator to generate all the needed modulations for WWV (the
tones, ticks, and 100 Hz timecode). Synthesizing the voice
announcements might be a bit more challenging <grin> "At the tone,

Coordinated Universal Time is...." You could even have a switch to
change back and forth between WWV and WWVH.

>
> But again - this is probably not what you're really after :-)
>
> 73
> LA4RT Jon

2212. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 16:52:53 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <felkd5cvi1@news.jpl.nasa.gov>
Source record: 35544

Frnak McKenney wrote:

>
> Hm... I don't _think_ so. At least, I havent heard of any plans for
> a High-Def upgrade to Usenet lately, but with Congress currently in
> session I suppose anything is possible.
>
> As for testing the clock's accuracy, you're right about needing a
> second source ("Qui custodiet ipsos custodes?" or something like
> that? <grin>). On the other hand, as long as the digits are
> flashing by, I'm happy to "just trust them".
>

One needs three clocks.. if you have only two, you only know that they differ. If you have three, you can detect the failed clock, because the other two read the same time.

Of course, if the different clocks have different accuracies or reliabilities, that's another story.

For a more detailed treatment of such things, you might want to check out the "Byzantine General" problem.

> Based on the feedback from other posters, it's likely a consequence
> of 10MHz propagation. A VLF RF signal like 60KHz reportedly does a
> much better job of getting a readable signal to a wide area.

Although in my house (southern California), the 60 kHz signal seems to fade in and out on a daily basis.

2213. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 17:24:20 UTC
From: oriel36 <kelleher.gerald@gmail.com>
Message-ID: <1192123460.529487.159390@57g2000hsv.googlegroups.com>
Source record: 35545
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

On 10 Oct, 21:11, Cecil Moore <nos...@w5dxp.com> wrote:
> oriel36 wrote:
> > "'Scientific people,' proceeded the Time Traveller, after the pause
> > required for the proper assimilation of this, 'know very well that
> > Time is only a kind of Space. "
>
> I agree. I think time, like universal expansion,
> is an illusion akin to a religion. I tend to agree
> with Julian Barbour in, "The End Of Time".
>
> What we experience as a "passing-of-time event",
> is only a change whose probability function has
> collapsed. The past is *where* (not when) all
> probability functions have collapsed. The future
> is *where* (not when) no probability functions have
> collapsed. Time, after all, is only a physical
> dimensional *change* in the rotation of the earth
> and/or in earth's orbit around the sun.
>
> IMO, time is no more real than the Sun-God riding
> his chariot across the sky every day. Any equation
> that contains a time term needs to take that into
> account.
> --
> 73, Cecil http://www.w5dxp.com

I see billions of dollars will be spent on investigating 'dark matter'
and 'dark energy' and that scam takes some doing but it pales in
comparison to the original imaginative junk of Newton/Flamsteed.

You have all the self-assurances of somebody who truly believes in
what would normally be harmless nonsense but unfortunately the same
people who believe in the junk are commenting on climate as 'experts'.

2214. Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 17:38:47 UTC
From: Tony Giacometti <TonyGiacometti@gmail.com>
Message-ID: <wZqdnfQWw5AZwpPanZ2dnUVZ_sCtnZ2d@hawaiiantel.net>
Source record: 35546

I live in a neighborhood that as the years have gone on
has added a number of new homes. This has increased the
electrical "noise" for me where S1 or S2 on 80 meters 6-8 yrs ago
is now S7 to S9. At this point in time I don't have the room for a K9AY
setup. I can only "dream" of a beverage.

I have a Timewave ANC-4 which works very well on 40 meters as I can null out
ALL the "noise".

Not so on 80 meters as it only knocks it down 2 S Units.
At best I have an S-6 noise level.

This leads me to believe that I need a separate sensing antenna for 80
meters. Anyone have any ideas for this problem? Is this thinking correct?

I have been looking at low noise receiving loops and other low noise
antennas. Wellbrook at http://www.wellbrook.uk.com/ seems to have some
interresting possibilities, but some of the reviews I have read have made me
hesistant to purchase any of their products.

What I need is some serious input from anyone who has any experience and
knowledge in dealing with low band noise issues.
As I am now space limited due to all the new neighbors any solution would
need to take this into consideration.

TIA

2215. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 17:39:02 UTC
From: gsm@mendelson.com
Message-ID: <slrnfgsnmn.3fk.gsm@cable.mendelson.com>
Source record: 35547

Jim Lux wrote:

> Why not take the GPS disciplined oscillator (e.g. a Z8301) and use that
> to synthesize a fake WWV signal (which you could program up in the AVR),
> and radiate that to your MACII. You can easily divide down the 10 MHz
> from the oscillator to generate all the needed modulations for WWV (the
> tones, ticks, and 100 Hz timecode). Synthesizing the voice
> announcements might be a bit more challenging <grin> "At the tone,
> Coordinated Universal Time is...." You could even have a switch to
> change back and forth between WWV and WWVH.

Talking clock programs have been around for a long time. All you need
is samples for 0 through 24, 30, 40, and 50 and a few words. You could
even play games with it, I'm sure the clock does not care, for
example "At the beep, the fake univeristy time is" and so on.

You really don't need to do much at all, since if I remember correctly,
it's an AM modulated signal, with no modulation also being no carrier.
Am modulation and on/off switching of a high power radio signal is
fairly complex, but at the microwatt level it should be easy.

It's fairly slow so even a reed relay connected to a GPIO line
would do. I'm sure there are all sorts of digitaly controlled
analog switch chips that will quickly and cleanly switch 10mHz.

As an aside, if I remember correctly, the 60kHz version is just
pulse code modulation of a carrier at a very slow baud rate,
so it would be really easy.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

2216. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 17:54:09 UTC
From: gsm@mendelson.com
Message-ID: <slrnfgsojo.3nk.gsm@cable.mendelson.com>
Source record: 35548

Tony Giacometti wrote:

> This leads me to believe that I need a separate sensing antenna for 80
> meters. Anyone have any ideas for this problem? Is this thinking correct?

I would start with a T2FD. It's simple to build and cheap. The only expensive
part is the loading resistor which for receiving only can be a 1/4 watt.

A balun would help, for receiving you can use a TV balun.

> I have been looking at low noise receiving loops and other low noise
> antennas. Wellbrook at http://www.wellbrook.uk.com/ seems to have some
> interresting possibilities, but some of the reviews I have read have made me
> hesistant to purchase any of their products.

Each one has its benefits and its costs. How much you want to spend on an
antenna is a personal decisison and unfortunately, you can't tell if it
really does anything for you until you have bought it.

An other possibility is to use an active antenna and mount it high up.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

2217. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 18:04:43 UTC
From: Tony Giacometti <TonyGiacometti@gmail.com>
Message-ID: <CdGdnWjBjfoN-JPanZ2dnUVZ_uSgnZ2d@hawaiiantel.net>
Source record: 35549

Geoffrey S. Mendelson wrote:

> Tony Giacometti wrote:
>
>> This leads me to believe that I need a separate sensing antenna for 80
>> meters. Anyone have any ideas for this problem? Is this thinking correct?
>
> I would start with a T2FD. It's simple to build and cheap. The only
> expensive part is the loading resistor which for receiving only can be a
> 1/4 watt.
>
> A balun would help, for receiving you can use a TV balun.

I am confused.....are you suggesting I use a T2FD for a noise sensing antenna to be used with my ANC-4?

Or should I take down my vertical transmitting antenna and replace it with a T2FD?

The vertical I use works extremely well for transmitting, its not going away. What I need is a solution to the noise. Which would be a low noise receive only antenna of some type.

>
>> I have been looking at low noise receiving loops and other low noise
>> antennas. Wellbrook at http://www.wellbrook.uk.com/ seems to have some
>> interresting possibilities, but some of the reviews I have read have made
>> me hesistant to purchase any of their products.
>
> Each one has its benefits and its costs. How much you want to spend on an
> antenna is a personal decisison and unfortunately, you can't tell if it
> really does anything for you until you have bought it.

I do believe that any antenna's performance is entirely dependent on the environment its in.

>
> An other possibility is to use an active antenna and mount it high up.

any suggestions as to which one I might use?

>
> Geoff.
>

2218. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 18:12:54 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <470e67a8$0$15387$4c368faf@roadrunner.com>
Source record: 35550

"Gene Fuller" <W4SZzzzzzz@att.net> wrote in message
news:we8Pi.661357$p47.616870@bgtnsc04-news.ops.worldnet.att.net...
> art wrote:
>> On 9 Oct, 19:35, John Smith <assemblywiz...@gmail.com> wrote:
>>> art wrote:
>>>> www.newswise.com/articles/view/532935
>>> Yeah, ole' Robert Vincent is a sore spot in the NG, I'd imagine. Made
>>> A$$'es out of all the "experts" and continues to do so ... sometimes
>>> there is real justice.
>>>
>>> Regards,
>>> JS
>>
>> Yup, the experts were not experts after all just phony's.
>> Ofcourse we now have to wait for comments like " I knew that all the
>> time",
>> "I have been using that method for years", "that was invented by
>> Mantovani
>> a hundred yeard ago but he just didn't get around to printing it"
>> Art
>>
>
> The patent, US 7187335, is a real hoot. I especially like the part where
> he describes doubling the bandwidth by adding a parasitic winding
> intertwined with the base coil helix.
>
> Do you suppose his antenna is in equilibrium? Could proper application of
> Artsian-Gaussian theory improve it even more?
>
> :D
>
> 73,
> Gene
> W4SZ

Hi Gene, From the data posted by Vincent I dont think he is trying to be a fraud. Maybe he is just unaware that the data he is discovering about short antennas is about 70 or 80 years old. That would be giving him the benifit of the doubt.

Jimmie

2219. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 18:13:13 UTC
From: Steve <sdaniel13@speakeasy.net>
Message-ID: <1192126393.564566.92510@57g2000hsv.googlegroups.com>
Source record: 35551

On Oct 11, 1:38 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
> I live in a neighborhood that as the years have gone on
> has added a number of new homes. This has increased the
> electrical "noise" for me where S1 or S2 on 80 meters 6-8 yrs ago
> is now S7 to S9. At this point in time I don't have the room for a K9AY
> setup. I can only "dream" of a beverage.
>
> I have a Timewave ANC-4 which works very well on 40 meters as I can null out
> ALL the "noise".
>
> Not so on 80 meters as it only knocks it down 2 S Units.
> At best I have an S-6 noise level.
>
> This leads me to believe that I need a separate sensing antenna for 80
> meters. Anyone have any ideas for this problem? Is this thinking correct?
>
> I have been looking at low noise receiving loops and other low noise
> antennas. Wellbrook athttp://www.wellbrook.uk.com/seems to have some
> interresting possibilities, but some of the reviews I have read have made me
> hesistant to purchase any of their products.
>
> What I need is some serious input from anyone who has any experience and
> knowledge in dealing with low band noise issues.
> As I am now space limited due to all the new neighbors any solution would
> need to take this into consideration.
>
> TIA

What kind of sense antenna are you currently using? I use an active
whip as a sense antenna (specifically, an H-800 "Skymatch" antenna)
and it enables me to squash *any* noise on 80 meters using my ANC-4.

2220. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 18:13:44 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <sJtPi.204316$ax1.145553@bgtnsc05-news.ops.worldnet.att.net>
Source record: 35552

John Smith wrote:
> Gene Fuller wrote:
>
> > ...
>> The patent, US 7187335, is a real hoot. I especially like the part
>> where he describes doubling the bandwidth by adding a parasitic
>> winding intertwined with the base coil helix.
>>
>> Do you suppose his antenna is in equilibrium? Could proper application
>> of Artsian-Gaussian theory improve it even more?
>>
>> :D
>>
>> 73,
>> Gene
>> W4SZ
>
> What? You don't see cutting the capacitance between winding turns as
> causing some measurable effect which in turn affects a property of the
> antenna proper?
>
> Thicker conductor(s) usually means a measurable gain in bandwith, with a
> parasitic element in such close proximity to the major element, a gain
> in bandwidth is not that difficult to propose and attempt to
> prove/disprove.
>
> Regards,
> JS

John,

The effects you mention may have some impact on bandwidth, but they don't double it. And the capacitance probably increases, not decreases. Placing an extra conductor between two capacitor plates increases the capacitance. At the same time placing a grounded shield between two capacitor plates reduces or eliminates the coupling between the original plates. It is not clear to me which effect would dominate in this case. In either case it is unlikely to be very important.

Lots of people understand how to make an antenna broadband; simply add resistance. This is not always "bad". It is merely a choice.

Just for grins I did a little EZNEC experiment. I started with a base loaded monopole that used a generated helix as the loading coil. I adjusted and resonated the system to SWR = 1 and took a look at the

bandwidth. I arbitrarily took SWR = 2 as the bandwidth limits. I then added a parasitic winding between the turns of the helix. This winding was not connected to anything. I reran the simulations.

What I found was interesting, but not surprising.

When the wires were treated as lossless, there was virtually no difference in bandwidth or any other parameter. The parasitic winding had essentially no impact.

When I changed the wires to copper, the bandwidth increased in both cases. However, in the case with the parasitic winding the new bandwidth was 2.5 times as large as the case without the extra winding. The resonant input impedance was also about 2.5 times larger.

There is only one plausible explanation for this observation. The parasitic winding adds loss to the antenna system. I won't claim this is "bad". Depends on the characteristics desired.

The bottom line is that there is no wondrous invention here. Either Vincent knew about this effect and chose to ignore it, or he did not understand what was happening. The capacitance explanation is just baloney.

73,
Gene
W4SZ

2221. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 18:14:09 UTC
From: gsm@mendelson.com
Message-ID: <slrnfgsprv.3vp.gsm@cable.mendelson.com>
Source record: 35553

Tony Giacometti wrote:
> I am confused.....are you suggesting I use a T2FD for a noise
> sensing antenna to be used with my ANC-4?
>
> Or should I take down my vertical transmitting antenna and replace it with a
> T2FD?

Neither. I was suggesting (and obviously not very well) that you use it as
a receiving antenna. It's very low noise. It makes a good transmitting
antenna too, but you need to have a big enough balun and termination
resistor to handle the power.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

2222. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 18:21:29 UTC
From: Robert Smts <bob@rsmits.ca>
Message-ID: <0c79bbc1da859d0f1da580f2e248779d@grapevine.islandnet.com>
Source record: 35554

Frnak McKenney wrote:

>
> Robert,
>
> Thank you for joining in.
>
> On Tue, 09 Oct 2007 22:35:29 -0700, Robert Smts <bob@rsmits.ca> wrote:
>>Frnak McKenney wrote:
>>> I'm in Richmond, Virginia and I'm trying to noticeably improve my
>>> reception of WWV's 10MHz signal from Fort Collins, Colorado. It all
>>> seemed so simple, two weeks ago: wind some wire, solder a
>>> connector, and Hey...presto! a clean WWV signal. <grin!>
> --snip--
>
>>Frank, can't you erect anything outside at all? A 10 metre dipole,
>>is after all, only about 5 metres long. And if you can't do that,
>>what kind of attic do you have? If your house is oriented
>>correctly, you could even build a three element wire yagi pointed
>>west inside the attic.
>
> Um... 10m? I was hoping for 10MHz/30m. Or have I missed
> something? (Wouldn't surprise me -- my 1st Class ticket expired
> several decades back.)
>
HMMMM. I was having a blonde moment, I think. Of course I meant 10 MHz and
not 10 Metres. The dimensions were correct, though for 10 MHz. Looks like
one of those days where the brain fades...

> Okay... ARRL Antennas, Chapter 8: Multielement Arrays. We've got
> an (approximately, given skip) vertically-polarized 10MHz signal, so
> the E-field is moving up and down and the wavefront is a circular
> ripple (nearly a straight line by the time it gets to Richmond)
> travelling roughly west-to-east, that is, it's hitting my house
> end-on.
>
>>Dimensions shouldn't be that critical for receive only, and space
>>the elements at about 2.5 metres. Basically one element at about 47
>>feet, one at about 49.3 feet, and one at about 45 feet. Split the
>>47 ft one into two, feed it directly with 50 ohm coax, one side to
>>the shield, one to the centre conductor, and you have a three
>>element wire beam pointed, hopefully, west. (Put the longest
>>element on the east side, the shortest on the west.)
>
> Um... if I label them as A/47ft, B/49ft, and C/45ft, the picture I

> come up with looks like this from overhead:
>
> | | |
> | | |
> <--- To Fort Collins | + |
> | + |
> | | |
> | | |
> (scale)
> |.....C.A.B
>
>
> I definitely think I'm missing something, but then, I haven't really
> made it that far into the Antenna Handbook.
>
> Anyway, thanks for the suggestion.

You're welcome. Your characterisation of the antenna as above is correct,
and hopefully your attic is correctly oriented. Of course if you can put it
outside, fixed wire beams are often very useful.
>
>
> Frank
> --
> "Our Constitution is in actual operation; everything appears to
> promise that it will last; but in this world nothing is certain
> but death and taxes." -- Benjamin Franklin
> --
> Frank McKenney, McKenney Associates
> Richmond, Virginia / (804) 320-4887
> Munged E-mail: frank uscore mckenney ayut minds pring dawt cahm (y'all)

2223. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 18:26:03 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1192127163.237200.31200@k79g2000hse.googlegroups.com>
Source record: 35555

On Oct 11, 5:12 am, Frnak McKenney
<fr...@far.from.the.madding.crowd.com> wrote:
> On Wed, 10 Oct 2007 10:19:49 -0700, Richard Clark <kb7...@comcast.net> wrote:
> > On Tue, 09 Oct 2007 02:16:37 -0000, Frnak McKenney
> ><fr...@far.from.the.madding.crowd.com> wrote:
>
> >>Am I asking too much?
>
> >Hi Frnak,
>
> >Judging by the questions and responses, I would have to say "Yes."
>
> >To this point you haven't exactly demonstrated you have a problem,
> >just a complaint of a signal of poor quality to a human's perception.
> >For the clock itself, that complaint is arguably weak.
>
> >Let's just examine the evidence for the problem: There is none!
>
> >You have a clock that has 100mS resolution, and yet you have never
> >said how much it is off. 100mS? 1S? 10S? 1 minute? 1 Hour? All,
> >or any part of any of these metrics?
>
> It's hard to tell exactly how much the clock is off by.
>
> Every time the power hiccups, or I have to move the MAC-II, or power
> down the outlet the display switches to something like this (best
> viewed with a fixed-width font):
>
> _ _
> _ _ /_ /_ /_ /_
> / / /_/ /_ _/ /_ /_
>
> and it stays that way for weeks. Or months.
>
> >As Reggie would have chimed in at this point "If you can't measure it
> >and express it with a quantifiable, then you don't know anything."
>
> Given the extent of my ignorance concerning 'most everything, that
> seems likely. <grin!>
>
> >Of course, your only source of accurate information is the one you are
> >suggesting has a problem. It probably doesn't have a problem, but
> >then how does one use this source's accuracy to check itself? You
> >would need a second clock to check it, and we would be hearing your

> >complaint in stereo.
>
> Hm... I don't _think_ so. At least, I havent heard of any plans for
> a High-Def upgrade to Usenet lately, but with Congress currently in
> session I suppose anything is possible.
>
> As for testing the clock's accuracy, you're right about needing a
> second source ("Qui custodiet ipsos custodes?" or something like
> that? <grin>). On the other hand, as long as the digits are
> flashing by, I'm happy to "just trust them".
>
> >I've calibrated time standards to the nearest 100nS and it is
> >accomplished at one sitting, no need for total connectivity such as
> >you might imagine (unless the clock you have is especially crappy).
>
> >Your clock has a resolution of 0.1 second. There are roughly 1
> >million ticks of the display in a day. A simple XTAL oscillator at 10
> >MHz would exhibit 50ppm stability and in a day wander up to 0.5
> >second. The next day it might wander back, the day following it might
> >slip below by 0.5 second.
>
> If I read the MAC-II manual correctly, each time it "connects to
> WWV" (gets a recognizable signal) it calculates and saves an
> adjustment value. The front panel has two LEDs labelled "TRIM UP"
> and "TRIM DN" to indicate how well it's doing.
>
> > ... You would be hard pressed to confirm this
> >with over the air matching to the strike of the WWV gong - except if
> >the clock is especially crappy (and it could be). The same XTAL might
> >also exhibit an absolute error of 50ppm and accumulate time error.
> >This would be far more noticeable over the course of a week (you could
> >confirm the error by listening to time announcements - but you have
> >been silent to this issue).
>
> True. And, while I'm sure the _WWV_ announcer hasn't been silent,
> _I_ haven't heard anything comprehendable from him/her/it out of my
> MAC-II's speaker at any point in the past few weeks.
>
> >These worst case errors all presume that the internal circuitry cannot
> >over the course of 24 hours manage to pull out one of 1400
> >synchronizing opportunities to phase lock out the error. These
> >circuits are generally optimized to accomplish just this (they work
> >fine in watches with a 60KHz signal after all). Your clock may be
> >especially crappy (but that is unlikely).
>
> Based on the feedback from other posters, it's likely a consequence
> of 10MHz propagation. A VLF RF signal like 60KHz reportedly does a
> much better job of getting a readable signal to a wide area.
>
> >The clock synchronizing circuits don't have to listen to the bandwidth

> >of noise you hear, the speaker is for your convenience, not the
> >clock's. I am sure that it works fine with only 1 LED lit - this is
> >not a case of "can you hear me now?"
>
> No, but (assuming you're subbing for WWV <grin!>) it would be nice
> to know I was going to get a readable message from "you" more than
> once every couple of months. (Why do I hear the echo of my parents'
> frustration during my colege days? <grin!>)
>
> Thanks for the feedback. I admit I hadn't thought that much about
> the accuracy of the MAC-II; I'm afraid I've been too caught up in
> simply trying to get digits instead of "error text" on the display.
>
> Frank
> --
> "A good traveller has no fixed plans and is not intent on
> arriving." -- Lao Tzu (570-490 BC)
> --
> Frank McKenney, McKenney Associates
> Richmond, Virginia / (804) 320-4887
> Munged E-mail: frank uscore mckenney ayut minds pring dawt cahm (y'all)

Gee, all this trouble you're having getting a good signal from WWV on 10MHz makes me wonder, "why??" I mean, why bother? It must be the challenge! I'm a bit closer to Ft. Collins, but I wouldn't expect things to be all that much different, and in any event, the same antenna I've used for them has worked fine for signals from W1AW, for frequency measuring tests. That antenna is just a short piece of wire, maybe five feet long, connected to a signal analyzer's input port. The signal analyzer's input doesn't even have a particularly good noise figure. But with it, I get a good enough signal from WWV to easily track the nocturnal/diurnal frequency shifts that happen as the path length changes. (The analyzer may not have a great RF front end, but it has a very stable frequency reference...) Similarly, I have a portable short wave radio that has an awful front end, and with just a 3 foot whip antenna, it gets WWV 10MHz fine most of the time. Obviously, there are times of the day when propagation just doesn't do it, but over the period of one day, and not during a geomagnetic storm, the signal is usually available.

All this makes me wonder if the receiver in your clock is OK. I'd start by looking at that; or at very least, see if a known-working radio receiver has as much trouble with the signal as the clock seems to. Given that the clock has a single frequency receiver, even a pretty simple receiver design should give decent performance.

It's also possible that you have some signal source on nominally 10MHz nearby, and you hear than instead of WWV. There are soooo many microprocessors around the average home these days that it's entirely possible that the source of the trouble is very nearby--but could also be in a neighbor's house (or car -- or garage -- or ??).

If you want an accurate clock and get tired of fooling with WWV-10MHz, and don't want to use WWVB-60kHz, you might consider using a GPS. As long as you can manage an antenna with a reasonably clear view of the sky, you should be able to have a clock reliably set to within less than a second accuracy practically all the time. Or, if you'd like to be independent of external references, modify your MAC with an oven oscillator. Oven stabilized crystal oscillators left on for a long time will almost always settle out to very low drift rates---one part in 10^8 over a year shouldn't be difficult, in my experience, and GPS signals can be used to calibrate it occasionally. One part in 10^8 is about 1/3 of a second per year.

Cheers,
Tom

2224. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 18:35:03 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <q1uPi.4995$oA2.2513@nlpi068.nbdc.sbc.com>
Source record: 35556
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

oriel36 wrote:
> You have all the self-assurances of somebody who truly believes in
> what would normally be harmless nonsense but unfortunately the same
> people who believe in the junk are commenting on climate as 'experts'.

IMO, we are already into the next ice age, the global
warming temperature having peaked some 8000 years ago.
http://en.wikipedia.org/wiki/Image:Ice_Age_Temperature.png
--
73, Cecil http://www.w5dxp.com

2225. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 18:37:45 UTC
From: Tony Giacometti <TonyGiacometti@gmail.com>
Message-ID: <IYidneylZd7Z8JPanZ2dnUVZ_jWdnZ2d@hawaiiantel.net>
Source record: 35557

Steve wrote:

> On Oct 11, 1:38 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
>> I live in a neighborhood that as the years have gone on
>> has added a number of new homes. This has increased the
>> electrical "noise" for me where S1 or S2 on 80 meters 6-8 yrs ago
>> is now S7 to S9. At this point in time I don't have the room for a K9AY
>> setup. I can only "dream" of a beverage.
>>
>> I have a Timewave ANC-4 which works very well on 40 meters as I can null
>> out ALL the "noise".
>>
>> Not so on 80 meters as it only knocks it down 2 S Units.
>> At best I have an S-6 noise level.
>>
>> This leads me to believe that I need a separate sensing antenna for 80
>> meters. Anyone have any ideas for this problem? Is this thinking correct?
>>
>> I have been looking at low noise receiving loops and other low noise
>> antennas. Wellbrook athttp://www.wellbrook.uk.com/seems to have some
>> interresting possibilities, but some of the reviews I have read have made
>> me hesistant to purchase any of their products.
>>
>> What I need is some serious input from anyone who has any experience and
>> knowledge in dealing with low band noise issues.
>> As I am now space limited due to all the new neighbors any solution would
>> need to take this into consideration.
>>
>> TIA
>
> What kind of sense antenna are you currently using? I use an active
> whip as a sense antenna (specifically, an H-800 "Skymatch" antenna)
> and it enables me to squash *any* noise on 80 meters using my ANC-4.

I use a small dipole like antenna where one half is at 45 degrees the feed
point is a few inches above ground and the other side runs paralle to
ground about 1-2 inches above ground. I think the whole sense antenna is
about 6 ft long and runs in a straight line.

I will look up the H-800 on the web.

Did you try various antennas and configurations before you settled on the
H-800? What made you decide to go with the H-800?

I tried different "antennas" and configurations, for this location this has
worked out the best that I have found. I do realize there could be a

zazillion different antennas and configurations.

2226. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 18:42:21 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <h8uPi.41571$RX.1446@newssvr11.news.prodigy.net>
Source record: 35558

Geoffrey S. Mendelson wrote:
> Tony Giacometti wrote:
>> Or should I take down my vertical transmitting antenna and replace it with a
>> T2FD?
>
> Neither. I was suggesting (and obviously not very well) that you use it as
> a receiving antenna. It's very low noise. It makes a good transmitting
> antenna too, but you need to have a big enough balun and termination
> resistor to handle the power.

This could be a very interesting experiment. Try the
T2FD but in steps.

1. Ordinary horizontal single-wire dipole

2. Ordinary horizontal folded dipole

3. T2FD

Reporting the noise on those three configurations
vs the vertical would be of wide interest.
--
73, Cecil http://www.w5dxp.com

2227. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 18:47:49 UTC
From: Tony Giacometti <TonyGiacometti@gmail.com>
Message-ID: <_oCdnQNHKaYA8pPanZ2dnUVZ_sqinZ2d@hawaiiantel.net>
Source record: 35559

Geoffrey S. Mendelson wrote:

> Tony Giacometti wrote:
>> I am confused.....are you suggesting I use a T2FD for a noise
>> sensing antenna to be used with my ANC-4?
>>
>> Or should I take down my vertical transmitting antenna and replace it
>> with a T2FD?
>
> Neither. I was suggesting (and obviously not very well) that you use it as
> a receiving antenna. It's very low noise. It makes a good transmitting
> antenna too, but you need to have a big enough balun and termination
> resistor to handle the power.
>
> Geoff.
>
>

Your suggestion is a good one. I found some construction plans, all I need
is the stuff to build it with.
I think it would make an excellent sense antenna, but won't know until I try
it to be sure.
Any idea if it shows any directivity?

2228. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 19:00:48 UTC
From: Tony Giacometti <TonyGiacometti@gmail.com>
Message-ID: <VIidnQUd1p0575PanZ2dnUVZ_qKgnZ2d@hawaiiantel.net>
Source record: 35560

Cecil Moore wrote:

> Geoffrey S. Mendelson wrote:
>> Tony Giacometti wrote:
>>> Or should I take down my vertical transmitting antenna and replace it
>>> with a T2FD?
>>
>> Neither. I was suggesting (and obviously not very well) that you use it
>> as a receiving antenna. It's very low noise. It makes a good transmitting
>> antenna too, but you need to have a big enough balun and termination
>> resistor to handle the power.
>
> This could be a very interesting experiment. Try the
> T2FD but in steps.
>
> 1. Ordinary horizontal single-wire dipole
>
> 2. Ordinary horizontal folded dipole
>
> 3. T2FD
>
> Reporting the noise on those three configurations
> vs the vertical would be of wide interest.

well, I already use a shortened dipole which has one leg at 45 degrees (the end is somewhere between 2.5 to 4 ft high, I have not measured it) to the feed point that is about 2 to 3 inches off the ground and the other leg is about 1 to 2 inches off the ground.

I don't use it directly into the receiver, I suppose I could, but I use the Timewave ANC-4 for reducing noise and its my noise sense antenna.

Obviously this one as I mentioned works extremely well on 40 meters, I can null out all noise, the S meter lays flat on S1, but the 80 meter performance is poor.

I would like to try the other antennas you mentioned as sense antennas, the problem is do I go full size on the folded dipole? I think I need to go full size with the T2FD in order to get it to work correctly.

How high above ground do I need to get it?

2229. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 19:08:16 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <felsb5dhk1@news.albasani.net>
Source record: 35561

Gene Fuller wrote:

> ...
> 73,
> Gene
> W4SZ

Well, OK. Post your EZNEC modeling mockup of the antenna and we'll
check it out ... :-)

JS

2230. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 19:09:52 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <felse5dmv1@news.albasani.net>
Source record: 35562

Jimmie D wrote:

> ...
> Hi Gene, From the data posted by Vincent I dont think he is trying to be a
> fraud. Maybe he is just unaware that the data he is discovering about short
> antennas is about 70 or 80 years old. That would be giving him the benifit
> of the doubt.
>
> Jimmie
>
>

Post that 70-80 year old EZNEC mockup you are familiar with and we'll
check it out ...

JS

2231. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 19:19:33 UTC
From: Steve <sdaniel13@speakeasy.net>
Message-ID: <1192130373.024316.112080@57g2000hsv.googlegroups.com>
Source record: 35563

On Oct 11, 2:37 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
> Steve wrote:
> > On Oct 11, 1:38 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
> >> I live in a neighborhood that as the years have gone on
> >> has added a number of new homes. This has increased the
> >> electrical "noise" for me where S1 or S2 on 80 meters 6-8 yrs ago
> >> is now S7 to S9. At this point in time I don't have the room for a K9AY
> >> setup. I can only "dream" of a beverage.
>
> >> I have a Timewave ANC-4 which works very well on 40 meters as I can null
> >> out ALL the "noise".
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> >> Not so on 80 meters as it only knocks it down 2 S Units.
> >> At best I have an S-6 noise level.
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> >> This leads me to believe that I need a separate sensing antenna for 80
> >> meters. Anyone have any ideas for this problem? Is this thinking correct?
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> >> I have been looking at low noise receiving loops and other low noise
> >> antennas. Wellbrook athttp://www.wellbrook.uk.com/seemsto have some
> >> interresting possibilities, but some of the reviews I have read have made
> >> me hesistant to purchase any of their products.
>
> >> What I need is some serious input from anyone who has any experience and
> >> knowledge in dealing with low band noise issues.
> >> As I am now space limited due to all the new neighbors any solution would
> >> need to take this into consideration.
>
> >> TIA
>
> > What kind of sense antenna are you currently using? I use an active
> > whip as a sense antenna (specifically, an H-800 "Skymatch" antenna)
> > and it enables me to squash *any* noise on 80 meters using my ANC-4.
>
> I use a small dipole like antenna where one half is at 45 degrees the feed
> point is a few inches above ground and the other side runs paralle to
> ground about 1-2 inches above ground. I think the whole sense antenna is
> about 6 ft long and runs in a straight line.
>
> I will look up the H-800 on the web.
>
> Did you try various antennas and configurations before you settled on the
> H-800? What made you decide to go with the H-800?
>

> I tried different "antennas" and configurations, for this location this has
> worked out the best that I have found. I do realize there could be a
> zazillion different antennas and configurations.- Hide quoted text -
>
> - Show quoted text -

I tried lots and lots of different sense antennas and got varying results. The H-800 gives me the best results from among all the sense antennas I've tried, though of course this could be a function of the particular kinds of noise present at my QTH.

I will say this. Because I live in an urban area it's been my aim to defeat RFI in every way possible. I use one of the Wellbrook loops and that helps, but nothing has been as big a help as the ANC-4 WHEN MATCHED with the right sense antenna.

Part of me suspects that the ideal setup, at least for me, would involve having a couple of different active whips to switch back and forth between. I think the H-800 does well on 80 meters because it's quite sensitive there. However, it's quite a bit less sensitive on, say, 20 meters and I'll bet I'd get better results using a different active whip, or perhaps a wire, on higher frequencies.

2232. Re: Recommendation sought: Handheld transceiver for 2 meters (& maybe 70 cm)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 19:36:35 UTC
From: Steve <sdaniel13@speakeasy.net>
Message-ID: <1192131395.132678.91420@v3g2000hsg.googlegroups.com>
Source record: 35564

On Oct 10, 3:08 pm, <> wrote:
> Steve <sdanie...@speakeasy.net> wrote:
> >I'm looking to purchase one new. Have looked over the ones available
> >at Universal, especially the Icom and Kenwood models, but would like
> >to hear from folks who have experience with them (or others). Will
> >consider a dual bander as well. Decent audio would be nice!
>
> >Thanks,
>
> I have two dual banders, Yeasu FT60 and Kenwood D7A. I like the Kenwood best.
> Has built in TNC but is a little pricey. Capable of APRS which is why I like it.
>
> Have fun
> 73
>
> >Steve
>
> ----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet
News==----http://www.newsfeeds.comThe #1 Newsgroup Service in the World! 120,000+
Newsgroups
> ----= East and West-Coast Server Farms - Total Privacy via Encryption =----

Is the APRS the only reason you prefer the Kenwood to the Yaesu, or
does it have other advantages as well?

2233. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 19:39:09 UTC
From: Tony Giacometti <TonyGiacometti@gmail.com>
Message-ID: <8PydnRPefKgI5pPanZ2dnUVZ_vzinZ2d@hawaiiantel.net>
Source record: 35565

Steve wrote:

> On Oct 11, 2:37 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
>> Steve wrote:
>> > On Oct 11, 1:38 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
>> >> I live in a neighborhood that as the years have gone on
>> >> has added a number of new homes. This has increased the
>> >> electrical "noise" for me where S1 or S2 on 80 meters 6-8 yrs ago
>> >> is now S7 to S9. At this point in time I don't have the room for a
>> >> K9AY setup. I can only "dream" of a beverage.
>>
>> >> I have a Timewave ANC-4 which works very well on 40 meters as I can
>> >> null out ALL the "noise".
>>
>> >> Not so on 80 meters as it only knocks it down 2 S Units.
>> >> At best I have an S-6 noise level.
>>
>> >> This leads me to believe that I need a separate sensing antenna for 80
>> >> meters. Anyone have any ideas for this problem? Is this thinking
>> >> correct?
>>
>> >> I have been looking at low noise receiving loops and other low noise
>> >> antennas. Wellbrook athttp://www.wellbrook.uk.com/seemsto have some
>> >> interresting possibilities, but some of the reviews I have read have
>> >> made me hesistant to purchase any of their products.
>>
>> >> What I need is some serious input from anyone who has any experience
>> >> and knowledge in dealing with low band noise issues.
>> >> As I am now space limited due to all the new neighbors any solution
>> >> would need to take this into consideration.
>>
>> >> TIA
>>
>> > What kind of sense antenna are you currently using? I use an active
>> > whip as a sense antenna (specifically, an H-800 "Skymatch" antenna)
>> > and it enables me to squash *any* noise on 80 meters using my ANC-4.
>>
>> I use a small dipole like antenna where one half is at 45 degrees the
>> feed point is a few inches above ground and the other side runs paralle
>> to ground about 1-2 inches above ground. I think the whole sense antenna
>> is about 6 ft long and runs in a straight line.
>>
>> I will look up the H-800 on the web.
>>

>> Did you try various antennas and configurations before you settled on the
>> H-800? What made you decide to go with the H-800?
>>
>> I tried different "antennas" and configurations, for this location this
>> has worked out the best that I have found. I do realize there could be a
>> zazillion different antennas and configurations.- Hide quoted text -
>>
>> - Show quoted text -
>
> I tried lots and lots of different sense antennas and got varying
> results. The H-800 gives me the best results from among all the sense
> antennas I've tried, though of course this could be a function of the
> particular kinds of noise present at my QTH.
>
> I will say this. Because I live in an urban area it's been my aim to
> defeat RFI in every way possible. I use one of the Wellbrook loops and
> that helps, but nothing has been as big a help as the ANC-4 WHEN
> MATCHED with the right sense antenna.
>
> Part of me suspects that the ideal setup, at least for me, would
> involve having a couple of different active whips to switch back and
> forth between. I think the H-800 does well on 80 meters because it's
> quite sensitive there. However, it's quite a bit less sensitive on,
> say, 20 meters and I'll bet I'd get better results using a different
> active whip, or perhaps a wire, on higher frequencies.

I have never considered an active antenna for the sense antenna.
Maybe that would work here.
I wonder if anyone else is doing the same thing or if you have "found"
something really unique.

2234. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 19:49:45 UTC
From: Steve <sdaniel13@speakeasy.net>
Message-ID: <1192132185.724444.11440@o80g2000hse.googlegroups.com>
Source record: 35566

On Oct 11, 3:39 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
> Steve wrote:
> > On Oct 11, 2:37 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
> >> Steve wrote:
> >> > On Oct 11, 1:38 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
> >> >> I live in a neighborhood that as the years have gone on
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> >> >> and knowledge in dealing with low band noise issues.
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> >> >> would need to take this into consideration.
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> >> > What kind of sense antenna are you currently using? I use an active
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> >> > and it enables me to squash *any* noise on 80 meters using my ANC-4.
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> >> is about 6 ft long and runs in a straight line.
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> >> I will look up the H-800 on the web.
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> >> Did you try various antennas and configurations before you settled on the
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> > forth between. I think the H-800 does well on 80 meters because it's
> > quite sensitive there. However, it's quite a bit less sensitive on,
> > say, 20 meters and I'll bet I'd get better results using a different
> > active whip, or perhaps a wire, on higher frequencies.
>
> I have never considered an active antenna for the sense antenna.
> Maybe that would work here.
> I wonder if anyone else is doing the same thing or if you have "found"
> something really unique.- Hide quoted text -
>
> - Show quoted text -

I know at least one other person who does it. He uses one of the McKay-
Dymek whips. I tried the H-800 simply because I already had it laying
around. I couldn't quite see buying an H-800 just for use as a sense
antenna, as they're fairly expensive, but I've seen them go on ebay
for not too much.

Active whips can be real noise magnets. A huge disadvantage if you're
using one as your receive antenna, but a big plus if noise is what you
want it to hear!

2235. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 20:22:32 UTC
From: Tony Giacometti <TonyGiacometti@gmail.com>
Message-ID: <f4OdncN6MsYuGJPanZ2dnUVZ_gednZ2d@hawaiiantel.net>
Source record: 35567

Steve wrote:

> On Oct 11, 3:39 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
>> Steve wrote:
>> > On Oct 11, 2:37 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
>> >> Steve wrote:
>> >> > On Oct 11, 1:38 pm, Tony Giacometti <TonyGiacome...@gmail.com>
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>> something really unique.- Hide quoted text -
>>
>> - Show quoted text -
>
> I know at least one other person who does it. He uses one of the McKay-
> Dymek whips. I tried the H-800 simply because I already had it laying
> around. I couldn't quite see buying an H-800 just for use as a sense
> antenna, as they're fairly expensive, but I've seen them go on ebay
> for not too much.
>
> Active whips can be real noise magnets. A huge disadvantage if you're
> using one as your receive antenna, but a big plus if noise is what you
> want it to hear!

But what you are saying is when you use the active antenna with the ANC-4
it works very well for cancelling out the noise.

2236. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 20:25:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13gt1lrn8ihktb3@corp.supernews.com>
Source record: 35568

Gene Fuller wrote:
> . . .
> What I found was interesting, but not surprising.
>
> When the wires were treated as lossless, there was virtually no
> difference in bandwidth or any other parameter. The parasitic winding
> had essentially no impact.
>
> When I changed the wires to copper, the bandwidth increased in both
> cases. However, in the case with the parasitic winding the new bandwidth
> was 2.5 times as large as the case without the extra winding. The
> resonant input impedance was also about 2.5 times larger.
>
> There is only one plausible explanation for this observation. The
> parasitic winding adds loss to the antenna system. I won't claim this is
> "bad". Depends on the characteristics desired.

You can easily verify this by noting the change in gain as the extra winding is added and deleted. You should also see a corresponding change in feedpoint resistance, assuming that the extra winding doesn't change the current distribution. A couple of additional interesting experiments would be:

1. Increase the loss of the coil in a model without the extra winding until the gain is the same as the model with copper loss and no extra winding. Then see how the bandwidth compares to the original model with extra winding.

2. Instead of increasing the loss of the coil, add a resistor to the base of the copper loss non-extra winding antenna and adjust it so the gain is the same as for the model with copper loss and extra winding. How does the bandwidth compare to the original model with the extra winding?
>
> The bottom line is that there is no wondrous invention here. Either
> Vincent knew about this effect and chose to ignore it, or he did not
> understand what was happening. The capacitance explanation is just baloney.
>
I'm afraid that's probably true. With antennas, you can choose any two of efficient, and broadband, and electrically small. This antenna claims all three, so I'm very skeptical.

Roy Lewallen, W7EL

2237. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 20:46:42 UTC
From: "pdrahn@coinet.com" <co_farmer@yahoo.com>
Message-ID: <1192135602.047497.302830@o80g2000hse.googlegroups.com>
Source record: 35569

On Oct 11, 10:38 am, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
> I live in a neighborhood that as the years have gone on
> has added a number of new homes. This has increased the
> electrical "noise" for me where S1 or S2 on 80 meters 6-8 yrs ago
> is now S7 to S9. At this point in time I don't have the room for a K9AY
> setup. I can only "dream" of a beverage.
>
> I have a Timewave ANC-4 which works very well on 40 meters as I can null out
> ALL the "noise".
>
> Not so on 80 meters as it only knocks it down 2 S Units.
> At best I have an S-6 noise level.
>
> This leads me to believe that I need a separate sensing antenna for 80
> meters. Anyone have any ideas for this problem? Is this thinking correct?
>
> I have been looking at low noise receiving loops and other low noise
> antennas. Wellbrook athttp://www.wellbrook.uk.com/seems to have some
> interresting possibilities, but some of the reviews I have read have made me
> hesistant to purchase any of their products.
>
> What I need is some serious input from anyone who has any experience and
> knowledge in dealing with low band noise issues.
> As I am now space limited due to all the new neighbors any solution would
> need to take this into consideration.
>
> TIA

Hi, Tony.
Several years ago I decided to put my ham radio station back on the air. The tallest trees on my property here in Central Oregon are junipers, about 35 feet tall. I managed to get the ends of a 40 meter dipole up towards the top of the trees. It was fed with coax and a balun. Petty noisy.

Later, I decided to try the old tried and true folded dipole using 300 ohm TV twinlead and an antenna tuner. This time I was able to get a 75 meter antenna up into the junipers. When I connected the antenna/tuner the receiver, there was no noise. I actually went outside and checked for something shorted. Then I checked the antenna for continuity with an ohm meter. All was ok. This was mid-day and there were no stations on 75 m. I tuned other bands and there was plenty of activity and very little noise. Later I began to hear stations from the mid-west on 75 meters.

Bottom line, I think if you can find the room for a folded dipole or other loop type antenna you will be surprised how much your noise level goes down.

Best of luck.
Paul, KD7HB

2238. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 20:47:29 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1192135649.390123.99510@50g2000hsm.googlegroups.com>
Source record: 35570

John Smith wrote:
> Jimmie D wrote:
>
> > ...
> > Hi Gene, From the data posted by Vincent I dont think he is trying to be a
> > fraud. Maybe he is just unaware that the data he is discovering about short
> > antennas is about 70 or 80 years old. That would be giving him the benifit
> > of the doubt.
> >
> > Jimmie
> >
> >
>
> Post that 70-80 year old EZNEC mockup you are familiar with and we'll
> check it out ...
>
> JS

I dont have EZNEC, But I will trust you if you care to model a 1/4wl
monopole and compare it to an 1/8wl monople operating against a
perfect counterpoise. Fine enginneer that Art is he should have no
trouble in calculating field intensity at a receiving antenna 1 mile
away. I have total respect for the integrity of your work as long as
you show your math.

Jimmie

2239. Re: Ft-857d And ATAS 120a

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 21:13:23 UTC
From: Antonio Vernucci <vernucci@tin.it>
Message-ID: <470e91f2$0$36445$4fafbaef@reader5.news.tin.it>
Source record: 35571

> I would like to here from anyone who as also used this combination and
> if they have moved away from the atas infavour of other types of
> screwdriver antennas.

I am using an older set-up than yours: a Yaesu FT-100D with an ATAS-100. The antenna is mounted on the back hood of a C-series Mercedes, close to the back windscreen, at its center. The ground side of the RF connector is connected to the car body.

SWR is almost 1:1 on all bands except on 10 MHz (where I use a very small MFJ tuner). Performance is incredibly good. I am particularly impressed of its behavior on 40-meters.

73

Tony I0JX Rome, Italy

2240. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 22:05:03 UTC
From: Steve <sdaniel13@speakeasy.net>
Message-ID: <1192140303.651720.181620@y42g2000hsy.googlegroups.com>
Source record: 35572

On Oct 11, 4:22 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
> Steve wrote:
> > On Oct 11, 3:39 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
> >> Steve wrote:
> >> > On Oct 11, 2:37 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
> >> >> Steve wrote:
> >> >> > On Oct 11, 1:38 pm, Tony Giacometti <TonyGiacome...@gmail.com>
> >> >> > wrote:
> >> >> >> I live in a neighborhood that as the years have gone on
> >> >> >> has added a number of new homes. This has increased the
> >> >> >> electrical "noise" for me where S1 or S2 on 80 meters 6-8 yrs ago
> >> >> >> is now S7 to S9. At this point in time I don't have the room for a
> >> >> >> K9AY setup. I can only "dream" of a beverage.
>
> >> >> >> I have a Timewave ANC-4 which works very well on 40 meters as I can
> >> >> >> null out ALL the "noise".
>
> >> >> >> Not so on 80 meters as it only knocks it down 2 S Units.
> >> >> >> At best I have an S-6 noise level.
>
> >> >> >> This leads me to believe that I need a separate sensing antenna for
> >> >> >> 80 meters. Anyone have any ideas for this problem? Is this thinking
> >> >> >> correct?
>
> >> >> >> I have been looking at low noise receiving loops and other low
> >> >> >> noise
> >> >> >> antennas. Wellbrook athttp://www.wellbrook.uk.com/seemstohavesome
> >> >> >> interresting possibilities, but some of the reviews I have read
> >> >> >> have made me hesistant to purchase any of their products.
>
> >> >> >> What I need is some serious input from anyone who has any
> >> >> >> experience and knowledge in dealing with low band noise issues.
> >> >> >> As I am now space limited due to all the new neighbors any solution
> >> >> >> would need to take this into consideration.
>
> >> >> >> TIA
>
> >> >> > What kind of sense antenna are you currently using? I use an active
> >> >> > whip as a sense antenna (specifically, an H-800 "Skymatch" antenna)
> >> >> > and it enables me to squash *any* noise on 80 meters using my ANC-4.
>
> >> >> I use a small dipole like antenna where one half is at 45 degrees the
> >> >> feed point is a few inches above ground and the other side runs
> >> >> paralle to ground about 1-2 inches above ground. I think the whole

> >> >> sense antenna is about 6 ft long and runs in a straight line.
>
> >> >> I will look up the H-800 on the web.
>
> >> >> Did you try various antennas and configurations before you settled on
> >> >> the H-800? What made you decide to go with the H-800?
>
> >> >> I tried different "antennas" and configurations, for this location
> >> >> this has worked out the best that I have found. I do realize there
> >> >> could be a zazillion different antennas and configurations.- Hide
> >> >> quoted text -
>
> >> >> - Show quoted text -
>
> >> > I tried lots and lots of different sense antennas and got varying
> >> > results. The H-800 gives me the best results from among all the sense
> >> > antennas I've tried, though of course this could be a function of the
> >> > particular kinds of noise present at my QTH.
>
> >> > I will say this. Because I live in an urban area it's been my aim to
> >> > defeat RFI in every way possible. I use one of the Wellbrook loops and
> >> > that helps, but nothing has been as big a help as the ANC-4 WHEN
> >> > MATCHED with the right sense antenna.
>
> >> > Part of me suspects that the ideal setup, at least for me, would
> >> > involve having a couple of different active whips to switch back and
> >> > forth between. I think the H-800 does well on 80 meters because it's
> >> > quite sensitive there. However, it's quite a bit less sensitive on,
> >> > say, 20 meters and I'll bet I'd get better results using a different
> >> > active whip, or perhaps a wire, on higher frequencies.
>
> >> I have never considered an active antenna for the sense antenna.
> >> Maybe that would work here.
> >> I wonder if anyone else is doing the same thing or if you have "found"
> >> something really unique.- Hide quoted text -
>
> >> - Show quoted text -
>
> > I know at least one other person who does it. He uses one of the McKay-
> > Dymek whips. I tried the H-800 simply because I already had it laying
> > around. I couldn't quite see buying an H-800 just for use as a sense
> > antenna, as they're fairly expensive, but I've seen them go on ebay
> > for not too much.
>
> > Active whips can be real noise magnets. A huge disadvantage if you're
> > using one as your receive antenna, but a big plus if noise is what you
> > want it to hear!
>
> But what you are saying is when you use the active antenna with the ANC-4
> it works very well for cancelling out the noise.- Hide quoted text -

>
> - Show quoted text -

Right. The whip is just a noise antenna in my setup.

2241. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 22:45:44 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fem92u$76q$1@news.albasani.net>
Source record: 35573

JIMMIE wrote:

> ...
> I dont have EZNEC, But I will trust you if you care to model a 1/4wl
> monopole and compare it to an 1/8wl monople operating against a
> perfect counterpoise. Fine enginneer that Art is he should have no
> trouble in calculating field intensity at a receiving antenna 1 mile
> away. I have total respect for the integrity of your work as long as
> you show your math.
>
>
> Jimmie
>

No.

We are talking about a small antenna ~25% of full 1/4 wave length which performs as well or outperforms its full length 1/4 wave version.

We are talking about a 1/2 wave antenna which is only 20-30% the length of its full length 1/2 wave version which performs as well or even out performs its' full 1/2 wave length ...

Show me an EZNEC model of what the Navy tested for Mr. Vincent--indeed, show me where anyone before Mr. Vincent was able to demonstrate a working model capable of the above characteristics?

JS

2242. WOW, check this out!!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 23:31:41 UTC
From: Sky <kenwood1701@hotmail.com>
Message-ID: <dnyPi.3002$Yb2.1066@newsfe12.lga>
Source record: 35574

http://www.youtube.com/watch?v=vBGIdf0VjQ4

2243. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-11 23:48:43 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192146523.360455.242790@y27g2000pre.googlegroups.com>
Source record: 35575

On 11 Oct, 11:12, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
> "Gene Fuller" <W4SZzzz...@att.net> wrote in message
>
> news:we8Pi.661357$p47.616870@bgtnsc04-news.ops.worldnet.att.net...
>
>
>
>
>
> > art wrote:
> >> On 9 Oct, 19:35, John Smith <assemblywiz...@gmail.com> wrote:
> >>> art wrote:
> >>>>www.newswise.com/articles/view/532935
> >>> Yeah, ole' Robert Vincent is a sore spot in the NG, I'd imagine. Made
> >>> A$$'es out of all the "experts" and continues to do so ... sometimes
> >>> there is real justice.
>
> >>> Regards,
> >>> JS
>
> >> Yup, the experts were not experts after all just phony's.
> >> Ofcourse we now have to wait for comments like " I knew that all the
> >> time",
> >> "I have been using that method for years", "that was invented by
> >> Mantovani
> >> a hundred yeard ago but he just didn't get around to printing it"
> >> Art
>
> > The patent, US 7187335, is a real hoot. I especially like the part where
> > he describes doubling the bandwidth by adding a parasitic winding
> > intertwined with the base coil helix.
>
> > Do you suppose his antenna is in equilibrium? Could proper application of
> > Artsian-Gaussian theory improve it even more?
>
> > :D
>
> > 73,
> > Gene
> > W4SZ
>
> Hi Gene, From the data posted by Vincent I dont think he is trying to be a
> fraud. Maybe he is just unaware that the data he is discovering about short
> antennas is about 70 or 80 years old. That would be giving him the benifit

> of the doubt.
>
> Jimmie- Hide quoted text -
>
> - Show quoted text -

Well said
Art

2244. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 00:37:55 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192149475.779920.171000@k35g2000prh.googlegroups.com>
Source record: 35576

On 11 Oct, 15:45, John Smith <assemblywiz...@gmail.com> wrote:
> JIMMIE wrote:
>
> > ...
>
> > I dont have EZNEC, But I will trust you if you care to model a 1/4wl
> > monopole and compare it to an 1/8wl monople operating against a
> > perfect counterpoise. Fine enginneer that Art is he should have no
> > trouble in calculating field intensity at a receiving antenna 1 mile
> > away. I have total respect for the integrity of your work as long as
> > you show your math.
>
> > Jimmie
>
> No.
>
> We are talking about a small antenna ~25% of full 1/4 wave length which
> performs as well or outperforms its full length 1/4 wave version.
>
> We are talking about a 1/2 wave antenna which is only 20-30% the length
> of its full length 1/2 wave version which performs as well or even out
> performs its' full 1/2 wave length ...
>
> Show me an EZNEC model of what the Navy tested for Mr. Vincent--indeed,
> show me where anyone before Mr. Vincent was able to demonstrate a
> working model capable of the above characteristics?
>
> JS

Gentlemen,
Vincent did produce a shorter antenna than was known before
with a 50 ohm impedance feed which is a huge advantage for designers
that want to hide, encapsulate or what have you for a small antenna
in this wifi age and nobody can take that away from him even tho his
knoweledge of antennas is limited.
If he understood Gaussian law then he could have made the Gaussian
antenna
which requires an element in equilibrium which means a FULL
WAVELENGTH.
I know you dislike the meaning of the term equilibrium b ut here it
is
indispesable.
Even without the knoweledge of Gauss he came very close to Gauss
or the biggest discovery of the century

If one winds a half wave length in a clockwise direction starting
at the top going down and then repeating with another halfwave length
but winding it in a counterclockwise direction(preferably winding
both
wires at the same time) and then joining together the two wires at the
top
he would then have a copy of my Gaussian antenna.
Note that the errant current flow that Vincent has on the feed line
now has
a path to travel where it can radiate and still have a resistive match
at
the feed points. This by the way is bidirectional
Now one can again expand the Gaussian principle by making the antenna
height
less than the wound diameter to make a circular polarity radiating
antenna.
Also note that Gauss's work then leads to a maximum gain when the
antenna
is at right angles to the earth but knowing that a full summation of
all vectors
on the radiator is around 10 to 12 degrees from the radiator axis the
radiator
when tilted will maximise a particular polarity alone.
You can deride Vincents achievement as something useless but the
Gaussian antenna
is here,it is real and the mathematics regarding the extension of the
Gaussian
aproach gives an insight as to how radiation is really created which
has been
the goal of scientists for more than a hundred years.
And the experts on this newsgroup who were told of this first derided
it also.
Make a sample of a single wound antenna and then make a mirror immage
of same
and joining at the top. Then study it to determine if the windings of
an
inductor represents a portionof the resonant length.....
remember that augument, maybe you should revisit it! Yuri you can
provide
your normal account as to how antennas work in a contrary fashion.
And yes Roy you can repeat your phrase of "I don't understand it{"
As for others with computor programs you can alsomodel it for
yourselves
and then curse your computor.
Regards
Art KB9MZ.....XG

2245. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 01:04:00 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192151040.408013.325180@q3g2000prf.googlegroups.com>
Source record: 35577

On 11 Oct, 13:47, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> John Smith wrote:
> > Jimmie D wrote:
>
> > > ...
> > > Hi Gene, From the data posted by Vincent I dont think he is trying to be a
> > > fraud. Maybe he is just unaware that the data he is discovering about short
> > > antennas is about 70 or 80 years old. That would be giving him the benifit
> > > of the doubt.
>
> > > Jimmie
>
> > Post that 70-80 year old EZNEC mockup you are familiar with and we'll
> > check it out ...
>
> > JS
>
> I dont have EZNEC, But I will trust you if you care to model a 1/4wl
> monopole and compare it to an 1/8wl monople operating against a
> perfect counterpoise. Fine enginneer that Art is he should have no
> trouble in calculating field intensity at a receiving antenna 1 mile
> away. I have total respect for the integrity of your work as long as
> you show your math.
>
> Jimmie- Hide quoted text -
>
> - Show quoted text -

Jimmy,
I don't have eznec either but I can still experiment the old fashioned
way.
As for a recieve antenna by next experiment gyrates in that direction.
Having proved that the inductance and capacitance of a radiator are
acting as energy sinks
that explode when the terminal are closed I am now going to place a
gaussian antenna between
two 8 by 4 sheets of aluminium sheeting which I purchased.I want to
act as a capacitor from which
my antenna will draw energy from to provide a larger aparture for my
antenna for receiving.
Question remains as to how the circuit for the large capacitor turns
out and what amount
of energy it will absorb that I can steal from it to aid my Gaussian
antenna.I suppose

I could resonate the capacitor at the same frequency that I want to
receive!!!!!
It can all be a failure but it will be one less to make in the future.
Art

2246. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 01:58:36 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1192154316.924554.18860@e34g2000pro.googlegroups.com>
Source record: 35578

On Oct 11, 6:45 pm, John Smith <assemblywiz...@gmail.com> wrote:
> JIMMIE wrote:
>
> > ...
>
> > I dont have EZNEC, But I will trust you if you care to model a 1/4wl
> > monopole and compare it to an 1/8wl monople operating against a
> > perfect counterpoise. Fine enginneer that Art is he should have no
> > trouble in calculating field intensity at a receiving antenna 1 mile
> > away. I have total respect for the integrity of your work as long as
> > you show your math.
>
> > Jimmie
>
> No.
>
> We are talking about a small antenna ~25% of full 1/4 wave length which
> performs as well or outperforms its full length 1/4 wave version.
>
> We are talking about a 1/2 wave antenna which is only 20-30% the length
> of its full length 1/2 wave version which performs as well or even out
> performs its' full 1/2 wave length ...
>
> Show me an EZNEC model of what the Navy tested for Mr. Vincent--indeed,
> show me where anyone before Mr. Vincent was able to demonstrate a
> working model capable of the above characteristics?
>
> JS

http://www.fi.uba.ar/materias/6654/download/LFMFAntenna.pdf

Probably more than you ever wanted to know about short antennas.

Jimmie

2247. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 02:43:03 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192156983.232772.46070@q3g2000prf.googlegroups.com>
Source record: 35579

On 11 Oct, 18:58, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> On Oct 11, 6:45 pm, John Smith <assemblywiz...@gmail.com> wrote:
>
>
>
>
>
> > JIMMIE wrote:
>
> > > ...
>
> > > I dont have EZNEC, But I will trust you if you care to model a 1/4wl
> > > monopole and compare it to an 1/8wl monople operating against a
> > > perfect counterpoise. Fine enginneer that Art is he should have no
> > > trouble in calculating field intensity at a receiving antenna 1 mile
> > > away. I have total respect for the integrity of your work as long as
> > > you show your math.
>
> > > Jimmie
>
> > No.
>
> > We are talking about a small antenna ~25% of full 1/4 wave length which
> > performs as well or outperforms its full length 1/4 wave version.
>
> > We are talking about a 1/2 wave antenna which is only 20-30% the length
> > of its full length 1/2 wave version which performs as well or even out
> > performs its' full 1/2 wave length ...
>
> > Show me an EZNEC model of what the Navy tested for Mr. Vincent--indeed,
> > show me where anyone before Mr. Vincent was able to demonstrate a
> > working model capable of the above characteristics?
>
> > JS
>
> http://www.fi.uba.ar/materias/6654/download/LFMFAntenna.pdf
>
> Probably more than you ever wanted to know about short antennas.
>
> Jimmie- Hide quoted text -
>
> - Show quoted text -

Now a bunch of erronious information
He states for short antennas a good ground field is paramount
which is false. It is correct for a fractional wavelength antenna
but not for a short antenna. Then he goes on to relate a top hat with
efficiency
so the question is does the top hat make radiation per unit
length the same terminology as efficiency since the top hat does not
increase height?
Basically, if you have a fractional wavelength antenna then a ground
plane is
paramount to provide a low resistance to ground (power loss)for the
the ANTENNA circuit.
If a low resistance path to ground is not there then the
system is closed by the outside of the feed sheathing to transmitter
ground
which closes the ANTENNA system providing combination radiation as
well as system loss.
I say again, one must have equilibrium for maximum efficiency and that
requires a full wave length
radiator and at the same time holding to the LC ratio for that
length.
These are cardinal rules as shown by Gauss.
Regards
Art KB9MZ

2248. Re: Recommendation sought: Handheld transceiver for 2 meters (& maybe 70 cm)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 04:34:24 UTC
From: <>
Message-ID: <part1of1.1.u3iw$mD#3rxA7A@ue.ph>
Source record: 35580

Steve <sdaniel13@speakeasy.net> wrote:
>On Oct 10, 3:08 pm, <> wrote:
>> Steve <sdanie...@speakeasy.net> wrote:
>> >I'm looking to purchase one new. Have looked over the ones available
>> >at Universal, especially the Icom and Kenwood models, but would like
>> >to hear from folks who have experience with them (or others). Will
>> >consider a dual bander as well. Decent audio would be nice!
>>
>> >Thanks,
>>
>> I have two dual banders, Yeasu FT60 and Kenwood D7A. I like the Kenwood best.
>> Has built in TNC but is a little pricey. Capable of APRS which is why I like
>>it.
>>
>> Have fun
>> 73
>>
>> >Steve
>>
>> ----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet
>>News==----http://www.newsfeeds.comThe #1 Newsgroup Service in the World!
>>120,000+ Newsgroups
>> ----= East and West-Coast Server Farms - Total Privacy via Encryption =----
>
>Is the APRS the only reason you prefer the Kenwood to the Yaesu, or
>does it have other advantages as well?

My first radio was a Yaesu FT8800 mobile. It was necesarry to return it for
service twice in the first 3 months of use. This sort of turned me off on
Yaesu. I replaced the 8800 with a Kenwood TMD700. My base is a Kenwood TS2000
which I like very much. I then bought the Kenwood D7A to replace the Yaesu
handheld. All three Kenwoods have built TNC, and have similar menu structures
for ease of programming and work well with one another for APRS and packet. The
Kenwood mobile is easier to read the display. I am interested in "packet" radio
and the newly developing AVRS combining APRS and IRLP. My Kenwoods should be
good in these areas.
73

----== Posted via Newsfeeds.Com - Unlimited-Unrestricted-Secure Usenet News==----
http://www.newsfeeds.com The #1 Newsgroup Service in the World! 120,000+ Newsgroups
----= East and West-Coast Server Farms - Total Privacy via Encryption =----

2249. Re: Recommendation sought: Handheld transceiver for 2 meters (& maybe 70 cm)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 04:41:05 UTC
From: afcsman <afcsman@hotmail.com>
Message-ID: <hP2dnYURsJtCZ5PanZ2dneKdnZydnZ2d@comcast.com>
Source record: 35581

Mild rant: The mfrs are into planned obsolescence, especially on 2 mtr HTs. Unless you are an aficionado of Star-D or other exotic stuff, what do you really need besides digital tuning, PL, and a dozen or so memory channels? Of course, my opinion will offend the Ones who must be the "First Kid on the Block" to have the latest fad item.
Anyway, I really like my Yaesu VX-5, which is available used at reasonable price. It's a 5-watt tri-bander (6,2,70cm)which is software programmable. I was really excited when I bought it, but now find that for my use, it is secondary to a good 50-60 watt mobile when traveling away from the local repeaters. An old Yaesu FT-1500M serves for 2 mtrs.

73---afcsman
Steve wrote:
> I'm looking to purchase one new. Have looked over the ones available
> at Universal, especially the Icom and Kenwood models, but would like
> to hear from folks who have experience with them (or others). Will
> consider a dual bander as well. Decent audio would be nice!
>
> Thanks,
>
> Steve
>

2250. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 11:17:42 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <hb-dnWrFL-FLypLanZ2dnUVZ_sPinZ2d@bright.net>
Source record: 35582
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

Don't tell Al Gore...they may take him out of the running for a Nobel...

Cecil Moore wrote:
> oriel36 wrote:
>
>> You have all the self-assurances of somebody who truly believes in
>> what would normally be harmless nonsense but unfortunately the same
>> people who believe in the junk are commenting on climate as 'experts'.
>
>
> IMO, we are already into the next ice age, the global
> warming temperature having peaked some 8000 years ago.
> http://en.wikipedia.org/wiki/Image:Ice_Age_Temperature.png

--
Scott
http://corbenflyer.tripod.com/
Gotta Fly or Gonna Die
Building RV-4 (Super Slow Build Version)

2251. Re: Antenna/RF Analyzers anything other than MFJ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 11:19:13 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-1210070719130001@jbw-mac.itd.nrl.navy.mil>
Source record: 35583

In article <pan.2007.10.10.20.07.12.559620@spam.spam>, yea right
<spam@spam.spam> wrote:

> I've been looking to *up* my ham radio experience by constructing a few
> projects. Though I have a few toys already, (Spec analyzer, sweep gen
> scope) I've been looking at purchasing an RF analyzer. I am looking for
> something that can easily scope out resonant circuits, antennas and
> measure impedance and reactance.
>
> The MFJ series seems dominate in the market but does not cover all the
> freq ranges I'm interested in. I've found a company called Autek Research
> who seems to make a few continuous analyzers but find very little about
> them on google.
>
> Are there any other companies making RF analyzers?
>

Hello, and sure, there's a little firm out there called Agilent ;-) What you are seeking is a one-port (reflection measurements only) instrument that can measure the complex RF voltage (or current) reflection coefficient. From that VSWR, return loss and complex (resistance and reactance) impedance can be calculated and displayed. An RF vector network analyzer (VNA) will do all this and more. MFJ has managed to package an affordable but stripped down form of a one-port VNA. (Hey you asked about other companies but didn't say what you were willing to pay.)

Years ago the HP (now Agilent) catalog had an "RF Impedance Meter" that IIRC could make complex impedance measurements in the HF band. It provided display of impedance magnitude and angle using two analog meters. Perhaps one in good working order could be had at a hamfest or fleabay. Sincerely, and 73s from N4GGO,

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

2252. Re: Antenna/RF Analyzers anything other than MFJ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 12:10:36 UTC
From: Ralf Ballis <rb.news@arcor.de>
Message-ID: <470f6443$0$16109$9b4e6d93@newsspool1.arcor-online.net>
Source record: 35584

"yea right" <spam@spam.spam> schrieb im Newsbeitrag
news:pan.2007.10.10.20.07.12.559620@spam.spam...
> Are there any other companies making RF analyzers?

http://www.aeatechnology.com/html/product.htm

http://www.schomandl.de/funkmesstechnik.html

--
Vy 73 es 55 de Ralf, DL2MRB

2253. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 12:58:00 UTC
From: Randy Poe <poespam-trap@yahoo.com>
Message-ID: <1192193880.784141.149370@i13g2000prf.googlegroups.com>
Source record: 35585
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

Top-posting repaired.

On Oct 12, 7:17 am, Scott <acepi...@bloomer.net> wrote:
> Cecil Moore wrote:
> > oriel36 wrote:
>
> >> You have all the self-assurances of somebody who truly believes in
> >> what would normally be harmless nonsense but unfortunately the same
> >> people who believe in the junk are commenting on climate as 'experts'.
>
> > IMO, we are already into the next ice age, the global
> > warming temperature having peaked some 8000 years ago.
> >http://en.wikipedia.org/wiki/Image:Ice_Age_Temperature.png
>
> Don't tell Al Gore...they may take him out of the running for a Nobel...
>

As you no doubt know by the time you're reading this, he
got his Nobel.

And can you explain why, if we are in an ice age, the arctic
ice is melting faster than the most pessimistic models had
predicted?
http://nsidc.org/news/press/20070430_StroeveGRL.html

Don't glaciers normally advance in ice ages rather than
recede?

http://www.grida.no/climate/ipcc_tar/wg1/413.htm
http://environment.newscientist.com/article/dn11064

- Randy

2254. Why begin each of your posts with such monotonous auto-spam ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 13:39:56 UTC
From: Jeff☠Relf <Jeff_Relf@Yahoo.COM>
Message-ID: <Jeff_Relf_2007_Oct_12__6_39_Av@Cotse.NET>
Source record: 35586
Cross-posted to: sci.physics,rec.radio.amateur.antenna,sci.energy,sci.physics.electromag

Randy began his post:
“ Top-posting repaired.

On Oct 12, 7:17 am, Scott <acepi...@bloomer.net> wrote:
Cecil Moore wrote: ”.

F.Y.I. I'm constantly “ repairing ” your posts
by deleting this auto-generated crap.

I can see the god-damn thread,
so why begin each of your posts with such monotonous auto-spam ?

2255. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 13:50:23 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <xYKPi.1608$LD2.365@newssvr17.news.prodigy.net>
Source record: 35587
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

Randy Poe wrote:
> And can you explain why, if we are in an ice age, the arctic
> ice is melting faster than the most pessimistic models had
> predicted?

Short term variation of plus and minus 2.5 degrees
but the temperature envelope for the past 8000 years
shows a downtrend. We are not in an ice age yet
but the present ice age *cycle* began 8000 years
ago. It is possible that the greenhouse gases are
actually delaying the onset of that next ice age which
will eventually destroy America's breadbasket. Al Gore
will become one of the most ridiculed men in US history
(for the Nth time).
--
73, Cecil http://www.w5dxp.com

2256. Digitale Leeromgeving Zend Amateurs (DLZA)-cursus gratis.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 14:11:48 UTC
From: Delta-India-Golf DX groep <DIGTEAM@delta-india-golf.com>
Message-ID: <op.tz28dy0f8wy0yi@gesoft-zolder>
Source record: 35588

DLZA promotekst

Er zijn overal in het land mensen die graag zendamateur willen worden maar een goede cursusleider, cursuslokaal, of een cursus locatie is schaars, er is al sinds langere tijd weinig nieuwe aanwas in het amateurisme dus een reden te meer om hier iets aan te doen.

Er zijn immers meerdere middelen voorhanden om aan dit probleem een einde te maken, en het internet samen met het Voice over IP programma TEAMSPEAK kunnen we de tegenhangers van de digitale communicatie laten zien dat er veel meer mogelijk is. Het initiatief van zendamateurs en TEAMSPEAK is een van die middelen die het mogelijk maakt om de cursisten die verspreid over het gehele land zijn mee te laten doen aan deze nieuwe opzet.

Het was regelmatig zo dat cursisten vooraf afhaakten omdat ze meerdere kilometers moesten afleggen om bij een cursus aanwezig te kunnen zijn, de reistijd die voorheen verloren ging kan nu gebruikt worden om mee te doen aan deze DLZA-cursus. Als je net even 20 minuten beschikbaar hebt om iets aan de cursus te doen dan kan dat nu, gewoon de computer aan en via internet de cursus volgen. Geen E-mailtje sturen voor huiswerk controle, nee gewoon 100% mondelinge ondersteuning op de TeamSpeakserver met een van de docenten.

Weer of geen weer, je kan gewoon lekker thuis met je eigen koffie en koekie de cursus volgen vanuit je eigen luie stoel achter je eigen computertje. Zo heeft elke cursus opzet voor en nadelen maar van deze opzet blijken de voordelen wel erg veel naar voren te komen. Een ander voordeel van deze DLZA-cursus is dat deze cursus geheel gratis is, geen boeken kopen, geen bijkomende brandstof kosten maar als nadeel wel een internetaansluiting.

De docenten zullen je op de voet volgen bij het maken van de lessen, ze kunnen ook zien welke lessen je al wel of nog niet hebt gelezen, ze controleren de antwoorden en ook je eventuele voortgang. Maak je onnodig veel foutjes dan zullen ze op de TeamSpeak server van de Delta-India-Golf DX Groep graag aan je uitleggen wat een betere aanpak is, gaat alles goed dan luister je gewoon lekker mee in de Studeerkamer op de TeamSpeak server, alleen de cursisten en docenten kunnen in die 'room' een praatje maken, alle andere doen dat in een van de vele andere beschikbare kamers.

Ook is het mogelijk om met de docenten gewoon even prive te gaan in een van de beschikbare prive kamers, daar kun je dan ongestoord je probleem uitleggen, of gewoon vrijelijk praten over je antwoord keuzes zodat andere cursisten dit niet mee kunnen horen. Kortom mogelijkheden te over om allemaal in dit promotieverhaaltje samen te pakken.

De cursus is al beproefd en kent al twee groepen geslaagden die je op de amateurbanden al kan horen, sommige hadden echt nul ervaring met electronica of een andere cursus en lopen nu met het zogenaamde fel begeerde papiertje rond.

Het probleem van nieuwe drukkosten is ons onbekend, al moeten we vermelden dat vele cursisten wel de nodige inktpatronen gebruikt hebben om de cursus uit te printen. Wil je mee doen? Dat kan, lees dan de Aanmeldings procedure A t/m Y die op de hieronder vermelde website te vinden is onder DLZA, daar wordt duidelijk uiteengezet wat je moet doen.

http://www.delta-india-golf.com

Gelieve dit artikel op te nemen in jullie club blad, website, email-lijsten, ronde's of door het te schreeuwen van de daken. Help mee dit DLZA-project te ondersteunen daar waar mogelijk met jullie eigen mogelijkheden, al is het maar om meer amateurs op die banden te krijgen.

Met vriendelijke groeten het DLZA-Team.

2257. Re: Antenna/RF Analyzers anything other than MFJ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 14:33:33 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <yBLPi.2687$fd2.485@newsfe07.phx>
Source record: 35589

>
>> I've been looking to *up* my ham radio experience by constructing a few
>> projects. Though I have a few toys already, (Spec analyzer, sweep gen
>> scope) I've been looking at purchasing an RF analyzer. I am looking for
>> something that can easily scope out resonant circuits, antennas and
>> measure impedance and reactance.
>>
>> The MFJ series seems dominate in the market but does not cover all the
>> freq ranges I'm interested in. I've found a company called Autek Research
>> who seems to make a few continuous analyzers but find very little about
>> them on google.
>>
>> Are there any other companies making RF analyzers?

Take a look at W8WWV - Analyzing Three Antenna Analyzers

URL:
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/EvalAnalyzers.htm

Lamont

2258. Re: WOW, check this out!!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 16:45:22 UTC
From: Irv Finkleman <finkirv@shaw.ca>
Message-ID: <CwNPi.23991$Da.12123@pd7urf1no>
Source record: 35590

Sky wrote:

> http://www.youtube.com/watch?v=vBGIdf0VjQ4
>
Wow, and how!
Thanks for the tip!

Irv VE6BP

2259. Re: New state of matter discovered! was Re: RFI Question for HF mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 16:57:53 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <feo92kfic1@f04n12.cac.psu.edu>
Source record: 35441

Denny wrote:
> The medium brings much unwanted signal to my antenna in my car.
> Whether
> it is Art's particles, phlogiston, ether, intelligently designed
> thingies, or whatever, it isn't wanted.
>
> And your point is?

Finally, someone gets around to asking for my point. Thank you Denny!

My point in the whole thing was that in here we have BPL Threads,
Receiving 2 GHz AM signals in outer space. Strange threads about
alternative physics. While my query regarding a reasonably on-topic
mobile antenna and RFI problem didn't get a reply until I added an off
topic addition to the subject line.

Hey, I know. Just 'cuz I post it doesn't mean anyone has to answer.

- 73 de Mike KB3EIA -

2260. Re: New state of matter discovered! was Re: RFI Question for HF mobile

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 18:03:22 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <q0dvg3dvgna9v6236hcfubroq3fv22sp6q@4ax.com>
Source record: 35442

On Fri, 12 Oct 2007 12:57:53 -0400, Michael Coslo <mjc5@psu.edu>
wrote:

>While my query regarding a reasonably on-topic
>mobile antenna and RFI problem didn't get a reply until I added an off
>topic addition to the subject line.
>
>Hey, I know. Just 'cuz I post it doesn't mean anyone has to answer.

Hi Mike,

A plea for mercy if ever there was one (especially when antenna ghouls
are feasting on the corpse of an old announcement of a "new antenna").
I didn't respond the first time because you clouded the topic with the
introduction of the fuel pump "thwipping" which to me sounded like you
were complaining of an admittedly minor issue.

So, to return to the first part of your post: I will bet your rig's
power or ground is sharing the same fuse/line/ground as the ECM and
noise is being conducted into your rig.

Take the power lead for your rig all the way back to the battery post.
DC ground the rig to the chassis/block connection of the battery.

Adding ferrites to the ECM leads may kill or distort impulse signals
the ECM needs to properly run things.

73's
Richard Clark, KB7QHC

2261. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 18:44:19 UTC
From: oriel36 <kelleher.gerald@gmail.com>
Message-ID: <1192214659.210950.302460@q5g2000prf.googlegroups.com>
Source record: 35443
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

On Oct 11, 7:35 pm, Cecil Moore <nos...@w5dxp.com> wrote:
> oriel36 wrote:
> > You have all the self-assurances of somebody who truly believes in
> > what would normally be harmless nonsense but unfortunately the same
> > people who believe in the junk are commenting on climate as 'experts'.
>
> IMO, we are already into the next ice age, the global
> warming temperature having peaked some 8000 years
ago.http://en.wikipedia.org/wiki/Image:Ice_Age_Temperature.png
> --
> 73, Cecil http://www.w5dxp.com

Cecil

The world is full of opinions,it is now called the 'scientific
method'.

While it looks like there is a broad gap between the error created by
Flamsteed in 1677 and global climate concerns of the present era,the
truth is more concise,specifically this late 17th century hoax -

http://www.analemma.com/Pages/framesPage.html

Ah,who am I kidding,you are into warped space.time travel ect and who
knows what else.

2262. The Radio List

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 20:30:02 UTC
From: b06dqn <b06dqn@gmail.com>
Message-ID: <1192221002.778807.239190@t8g2000prg.googlegroups.com>
Source record: 35444

Http://www.theradiolist.com - a new website has launched! find and listen to your favorite radios or promote your own radio.
You can add your radio free for now, the website is currently in a testing period.
There are some cool features like a browser player, with the embed code so you can take the player and put it anywhere (just like youtube videos), free hosting of your .asx .pls .ram files, and much more.

http://theradiolist.com come and take a look

2263. Re: How many watts-per-meter-squared is 1-photon-per-second if the photon is a 2 GHz radio wave?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 21:27:35 UTC
From: "R.H. Allen" <kkarie@hotmail.com>
Message-ID: <8cydnQuQrcxae5LanZ2dnUVZ_oytnZ2d@giganews.com>
Source record: 35445
Cross-posted to: sci.electronics.basics,rec.radio.amateur.space,rec.radio.amateur.antenna,sci.physics,sci.energy,alt.sci.physics.new-theories,sci.physics.electromag,sci.optics,alt.engineering.electrical

Green Xenon [Radium] wrote:
> Hi:
>
> How many watts-per-meter-squared is 1-photon-per-second if the photon is
> a 2 GHz radio wave?

Assuming you mean 1 photon per second per square meter, that's 1.3
yW/m^2 (that's 1.3 yoctowatts per square meter, or 1.3e-24 watts per
square meter).

2264. Best Multiband HF Vertical on a roof Options

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 21:44:25 UTC
From: matrixknowledge@googlemail.com
Message-ID: <1192225465.792973.207520@k35g2000prh.googlegroups.com>
Source record: 35446

All

Can anyone recommend a verical antenna that i can mount on the roof
of
my 3 story house that works from 80m upwards and wont upset the
nighbours (too much). I have looked at various Butternuts etc but it
seems like they only work well when ground mounted. Also keen to get
one that is not to noisy as in a relativly built up area. I would not
operate with more than 100W

I have looked at reviews on EHAM but they all seem to be mixed.

Thanks

Andiroo

2265. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 21:48:11 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <vYRPi.7986$6p6.2719@newssvr25.news.prodigy.net>
Source record: 35447
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

oriel36 wrote:
> Ah,who am I kidding,you are into warped space.time travel ect and who
> knows what else.

How can I believe in time-travel when I don't believe
that time even exists? Some changes are reversible
and some are not. If you want to consider a reversed
change to be time travel be my guest, but I don't
buy it.
--
73, Cecil http://www.w5dxp.com

2266. Re: Best Multiband HF Vertical on a roof Options

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 22:06:07 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <idSPi.4404$Pv2.2432@newssvr23.news.prodigy.net>
Source record: 35448

matrixknowledge@googlemail.com wrote:
> Can anyone recommend a verical antenna that i can mount on the roof
> of my 3 story house that works from 80m upwards and wont upset the
> nighbours (too much).

A 22 foot antenna with four 22 elevated radials driven
by an SC-230 will do a good job on 40m-10m and not bad
on 75m, at least on CW.
--
73, Cecil http://www.w5dxp.com

2267. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 22:45:23 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1192229123.095125.260400@i38g2000prf.googlegroups.com>
Source record: 35449

On Oct 11, 1:38 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
> I live in a neighborhood that as the years have gone on
> has added a number of new homes. This has increased the
> electrical "noise" for me where S1 or S2 on 80 meters 6-8 yrs ago
> is now S7 to S9. At this point in time I don't have the room for a K9AY
> setup. I can only "dream" of a beverage.
>
> I have a Timewave ANC-4 which works very well on 40 meters as I can null out
> ALL the "noise".
>
> Not so on 80 meters as it only knocks it down 2 S Units.
> At best I have an S-6 noise level.
>
> This leads me to believe that I need a separate sensing antenna for 80
> meters. Anyone have any ideas for this problem? Is this thinking correct?
>
> I have been looking at low noise receiving loops and other low noise
> antennas. Wellbrook athttp://www.wellbrook.uk.com/seems to have some
> interresting possibilities, but some of the reviews I have read have made me
> hesistant to purchase any of their products.
>
> What I need is some serious input from anyone who has any experience and
> knowledge in dealing with low band noise issues.
> As I am now space limited due to all the new neighbors any solution would
> need to take this into consideration.
>
> TIA

Just out of curiosity, have you tried locating the noise source. I had
the same experience you are having more or less.
I had been away from ham radio for a couple of years and when I fired
it all up again HF was really noisy so I ran the radio off of battery
while I shut down power to my house. I found the source of the noise
was the display on my microwave oven.
Short term solution was keeping the microwave unplugged until needed.
Long term solution was replacing the microwave. I did this when i
found a better one at Goodwill for less than $20. Also check for RF on
the coax during transmit. During rx this means the antenna is also
picking up signals from the shield which may be in close proximity to
noise generators.

Jimmie

2268. Re: Best Multiband HF Vertical on a roof Options

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 23:08:54 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <470FFE86.60505@bellsouff.net>
Source record: 35450

matrixknowledge@googlemail.com wrote:
> All
>
> Can anyone recommend a verical antenna that i can mount on the roof
> of
> my 3 story house that works from 80m upwards and wont upset the
> nighbours (too much). I have looked at various Butternuts etc but it
> seems like they only work well when ground mounted. Also keen to get
> one that is not to noisy as in a relativly built up area. I would not
> operate with more than 100W
>
>
> I have looked at reviews on EHAM but they all seem to be mixed.
>
>
> Thanks
>
>
> Andiroo
>

I used a roof mounted Butternut HF6V for several years with excellent results. Especially when compared to no antenna at all. Plus I never ran more than 100 watts. That is back before I got my amplifier, way before.

The surprise came when I bought and installed a Van Gordan Shorty All Bander and slopped the vee from the base of the tripod on which the Butternut was mounted down into my backyard. The legs were at a 50 degree angle and the peak (apex at the tripod) was pointed toward the southeast. The Shorty All Bander clearly out performed the HF6V (using steel siding as a counterpoise) on 30 meters downward. They performed about the same on 20 meters upward. The Shorty All Bander would have been invisible to everyone had I used a standoff on my third story and kept everything in the backyard, of which I didn't have much at all.

Today, if I couldn't work it out with the Shorty All Bander, I would buy an autotuner for wire antennas and mount a 30' piece of wire or tubing at ground level and place the tuner at the base, in a protective enclosure. I did discover later on that my Butternut did work a bit better on the ground, but the 50 ohm match went to hell, as predicted by others.

All of the antennas I have mentioned worked well enough for me to easily make contacts all over the world with just 100 watts. Any antenna is

better than no antenna. Don't let the antenna snobs get you down.

Ed, NM2K

2269. Re: Best Multiband HF Vertical on a roof Options

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-12 23:09:11 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <68TPi.1091$5c.430@bignews1.bellsouth.net>
Source record: 35451

matrixknowledge@googlemail.com wrote:
> All
>
> Can anyone recommend a verical antenna that i can mount on the roof
> of
> my 3 story house that works from 80m upwards and wont upset the
> nighbours (too much). I have looked at various Butternuts etc but it
> seems like they only work well when ground mounted. Also keen to get
> one that is not to noisy as in a relativly built up area. I would not
> operate with more than 100W
>
>
> I have looked at reviews on EHAM but they all seem to be mixed.
>
>
> Thanks
>
>
> Andiroo
>

I used a roof mounted Butternut HF6V for several years with excellent results. Especially when compared to no antenna at all. Plus I never ran more than 100 watts. That is back before I got my amplifier, way before.

The surprise came when I bought and installed a Van Gordan Shorty All Bander and slopped the vee from the base of the tripod on which the Butternut was mounted down into my backyard. The legs were at a 50 degree angle and the peak (apex at the tripod) was pointed toward the southeast. The Shorty All Bander clearly out performed the HF6V (using steel siding as a counterpoise) on 30 meters downward. They performed about the same on 20 meters upward. The Shorty All Bander would have been invisible to everyone had I used a standoff on my third story and kept everything in the backyard, of which I didn't have much at all.

Today, if I couldn't work it out with the Shorty All Bander, I would buy an autotuner for wire antennas and mount a 30' piece of wire or tubing at ground level and place the tuner at the base, in a protective enclosure. I did discover later on that my Butternut did work a bit better on the ground, but the 50 ohm match went to hell, as predicted by others.

All of the antennas I have mentioned worked well enough for me to easily make contacts all over the world with just 100 watts. Any antenna is

better than no antenna. Don't let the antenna snobs get you down.

Ed, NM2K

2270. Antenna book

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 00:40:41 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1192236041.750565.257340@z24g2000prh.googlegroups.com>
Source record: 35452

My wife picked up a book at a yard sale today for $1. Handbook of
Antenna Design by Rudge. I havnt had a chance to check it out yet, is
this a good book.

Jimmie

2271. B&W End-Fed Vee HF Antenna questions.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 00:42:41 UTC
From: Skipp says please no spam <spammenot@yahoo.com>
Message-ID: <fep4a1$jj3$1@skeeter.ucdavis.edu>
Source record: 35453

Anyone ever taken a moment to measure the values of the balun and
termination network in a B&W End-Fed Vee HF Antenna?

http://www.bwantennas.com/ama/veeant.ama.htm

I'm curious if the Balun is 1:1 and if you've measured the value
the resistive value of the balance network at the end of the wire is?

Your replies and thoughts as to how this antenna works?

thanks
skipp

skipp025 at yahoo.com

2272. Re: Antenna book

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 01:55:38 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <ur80h39il5ac81j7qppor5n5tdsmj9gqli@4ax.com>
Source record: 35454

On Fri, 12 Oct 2007 17:40:41 -0700, JIMMIE <JIMMIEDEE123@YAHOO.COM>
wrote:

>My wife picked up a book at a yard sale today for $1. Handbook of
>Antenna Design by Rudge. I havnt had a chance to check it out yet, is
>this a good book.

Hi Jimmie,

Praise your wife and read the book - then tell her it's great. Arthur
would probably recommend burning it if the index doesn't include
gaussian librium.

Here's a test. Does it have a formula for the radiation resistance of
an elementary dipole or loop? Both?

What would the formula evaluate the Rr of a quarter-quarterwave sized
vertical? For extra credit (applied to this author), what would be
the reactance? You may have to extrapolate that from a chart, but 10
bonus points (applied to this author) if there's an equation.

73's
Richard Clark, KB7QHC

2273. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 03:22:15 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1192245735.393140.150600@i13g2000prf.googlegroups.com>
Source record: 35455

On Oct 11, 4:25 pm, Roy Lewallen <w...@eznec.com> wrote:
> Gene Fuller wrote:
> > . . .
> > What I found was interesting, but not surprising.
>
> > When the wires were treated as lossless, there was virtually no
> > difference in bandwidth or any other parameter. The parasitic winding
> > had essentially no impact.
>
> > When I changed the wires to copper, the bandwidth increased in both
> > cases. However, in the case with the parasitic winding the new bandwidth
> > was 2.5 times as large as the case without the extra winding. The
> > resonant input impedance was also about 2.5 times larger.
>
> > There is only one plausible explanation for this observation. The
> > parasitic winding adds loss to the antenna system. I won't claim this is
> > "bad". Depends on the characteristics desired.
>
> You can easily verify this by noting the change in gain as the extra
> winding is added and deleted. You should also see a corresponding change
> in feedpoint resistance, assuming that the extra winding doesn't change
> the current distribution. A couple of additional interesting experiments
> would be:
>
> 1. Increase the loss of the coil in a model without the extra winding
> until the gain is the same as the model with copper loss and no extra
> winding. Then see how the bandwidth compares to the original model with
> extra winding.
>
> 2. Instead of increasing the loss of the coil, add a resistor to the
> base of the copper loss non-extra winding antenna and adjust it so the
> gain is the same as for the model with copper loss and extra winding.
> How does the bandwidth compare to the original model with the extra winding?
>
> > The bottom line is that there is no wondrous invention here. Either
> > Vincent knew about this effect and chose to ignore it, or he did not
> > understand what was happening. The capacitance explanation is just baloney.
>
> I'm afraid that's probably true. With antennas, you can choose any two
> of efficient, and broadband, and electrically small. This antenna claims
> all three, so I'm very skeptical.
>
> Roy Lewallen, W7EL- Hide quoted text -
>

> - Show quoted text -

Maybe it not the wire but the insulation on the wire, A little dielectric heating would surely make it more broadbanded.

Jimmie

2274. Re: Antenna book

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 03:39:37 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1192246777.286682.190520@t8g2000prg.googlegroups.com>
Source record: 35456

On Oct 12, 9:55 pm, Richard Clark <kb7...@comcast.net> wrote:
> On Fri, 12 Oct 2007 17:40:41 -0700, JIMMIE <JIMMIEDEE...@YAHOO.COM>
> wrote:
>
> >My wife picked up a book at a yard sale today for $1. Handbook of
> >Antenna Design by Rudge. I havnt had a chance to check it out yet, is
> >this a good book.
>
> Hi Jimmie,
>
> Praise your wife and read the book - then tell her it's great. Arthur
> would probably recommend burning it if the index doesn't include
> gaussian librium.
>
> Here's a test. Does it have a formula for the radiation resistance of
> an elementary dipole or loop? Both?
>
> What would the formula evaluate the Rr of a quarter-quarterwave sized
> vertical? For extra credit (applied to this author), what would be
> the reactance? You may have to extrapolate that from a chart, but 10
> bonus points (applied to this author) if there's an equation.
>
> 73's
> Richard Clark, KB7QHC

Richard, I found a few excerpts on the internet and found it included in the bibliography of several papers.This looks like a pretty good book. I also noticed it carries a hefty price tag at amazon. I think the wife did well. It way be a while before I can dig into it though. My plate is pretty full right now. I have to go to classes to become the system administrator. for a new computer system. for the next couple of months I am going to be concentrating on that.

Jimmie

2275. Re: B&W End-Fed Vee HF Antenna questions.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 03:54:14 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1192247654.563610.263270@e34g2000pro.googlegroups.com>
Source record: 35457

On Oct 12, 8:42 pm, Skipp says please no spam <spamme...@yahoo.com>
wrote:
> Anyone ever taken a moment to measure the values of the balun and
> termination network in a B&W End-Fed Vee HF Antenna?
>
> http://www.bwantennas.com/ama/veeant.ama.htm
>
> I'm curious if the Balun is 1:1 and if you've measured the value
> the resistive value of the balance network at the end of the wire is?
>
> Your replies and thoughts as to how this antenna works?
>
> thanks
> skipp
>
> skipp025 at yahoo.com

I saw someone selling the trerminators for this type of antenna at the
last hamfest I attended, I think it was the Wireman but not sure.

Probably a lot of bad things you could say about this antenna but it
will get you on-the-air with a minimum of fuss. Govt uses these a lot
for network communication where operation and setup is to be perfrmed
by someone of minimal training.

Jimmie

2276. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 06:03:08 UTC
From: Tony Giacometti <TonyGiacometti@gmail.com>
Message-ID: <RsWdnT2yQeQfwo3anZ2dnUVZ_tOtnZ2d@hawaiiantel.net>
Source record: 35458

JIMMIE wrote:

> On Oct 11, 1:38 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
>> I live in a neighborhood that as the years have gone on
>> has added a number of new homes. This has increased the
>> electrical "noise" for me where S1 or S2 on 80 meters 6-8 yrs ago
>> is now S7 to S9. At this point in time I don't have the room for a K9AY
>> setup. I can only "dream" of a beverage.
>>
>> I have a Timewave ANC-4 which works very well on 40 meters as I can null
>> out ALL the "noise".
>>
>> Not so on 80 meters as it only knocks it down 2 S Units.
>> At best I have an S-6 noise level.
>>
>> This leads me to believe that I need a separate sensing antenna for 80
>> meters. Anyone have any ideas for this problem? Is this thinking correct?
>>
>> I have been looking at low noise receiving loops and other low noise
>> antennas. Wellbrook athttp://www.wellbrook.uk.com/seems to have some
>> interresting possibilities, but some of the reviews I have read have made
>> me hesistant to purchase any of their products.
>>
>> What I need is some serious input from anyone who has any experience and
>> knowledge in dealing with low band noise issues.
>> As I am now space limited due to all the new neighbors any solution would
>> need to take this into consideration.
>>
>> TIA
>
> Just out of curiosity, have you tried locating the noise source. I had
> the same experience you are having more or less.
> I had been away from ham radio for a couple of years and when I fired
> it all up again HF was really noisy so I ran the radio off of battery
> while I shut down power to my house. I found the source of the noise
> was the display on my microwave oven.
> Short term solution was keeping the microwave unplugged until needed.
> Long term solution was replacing the microwave. I did this when i
> found a better one at Goodwill for less than $20. Also check for RF on
> the coax during transmit. During rx this means the antenna is also
> picking up signals from the shield which may be in close proximity to
> noise generators.
>
>

> Jimmie

I did a good assessment of the noise being heard here.
I found an electric razor charger that was some of the problem and
a computer printer was another I found.
So my home is quite clean unless something else has popped up which I don't
know about and can't locate.

I test with power on and power off. Right now theres very little difference
if any between the two.

I would think its coming from someplace else, but until I can come up with
the exact location I need to decide on a solution thats effective.

2277. Re: Antenna/RF Analyzers anything other than MFJ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 06:12:46 UTC
From: yea right <spam@spam.spam>
Message-ID: <pan.2007.10.13.06.12.46.46817@spam.spam>
Source record: 35459

On Wed, 10 Oct 2007 14:07:13 -0600, yea right wrote:

> I've been looking to *up* my ham radio experience by constructing a few
> projects. Though I have a few toys already, (Spec analyzer, sweep gen
> scope) I've been looking at purchasing an RF analyzer. I am looking for

Unreal!

Some of them babies are quite a bit too much for a hobby! Wow. Google
never showed allot of these.

With that in mind, I think I will either purchase the MFJ-269 or the VA1
and RF5 Combo pac from autek. The computer based units though cheaper and
more accurate, would not be always convenient to use.

2278. Re: Antenna book

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 07:57:32 UTC
From: Dave <someplace@nowhere-nice.com>
Message-ID: <47107a6c@212.67.96.135>
Source record: 35460

JIMMIE wrote:
> My wife picked up a book at a yard sale today for $1. Handbook of
> Antenna Design by Rudge. I havnt had a chance to check it out yet, is
> this a good book.
>
>
> Jimmie
>

I don't know the book, but there is a two volume set (one orange, one blue) by Rudge, Milne, Olver and Knight. Those are professional level antenna books. I suspect it is the same Rudge.

If yours is similar, I would think it is a steal at $1. Professional level antenna books can be very expensive.

My background is quite close to their target audance - I did an MSc degree in "Microwaves and Optoelectronics", and one of the options I took during that MSc was "Antennas and Radar".

Yet I'm the first to admit, I find the theory in these sort of books very hard at times. (I think having a maths degree might help, which I do not have).

G8WRB

2279. Re: Best Multiband HF Vertical on a roof Options

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 08:48:01 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <va2iVuFBZIEHFAT1@ifwtech.co.uk>
Source record: 35461

Ed Cregger wrote:
>
>Today, if I couldn't work it out with the Shorty All Bander, I would
>buy an autotuner for wire antennas and mount a 30' piece of wire or
>tubing at ground level and place the tuner at the base, in a protective
>enclosure.

Me too - with a 100W transceiver but no antenna, I wouldn't spend a single penny on factory-made HF antennas. Instead, I'd invest that money in a remote auto-ATU that can be used with a wide range of future antennas.

Most of the cost and complication of factory-built multiband antennas comes from the need for impedance matching on each band. With an auto-ATU, those worries are over - any convenient length of wire or tubing will work, and costs almost nothing.

You also have a lot more freedom to play with new antennas. The auto-ATU takes care of the matching chores, while you have all the fun... and that's priceless.

Unfortunately, the picture changes at power levels much above 100W, because the inductors, capacitors and relays suitable for a high-power auto-ATU are very expensive in commercial production quantities. However, there are still plenty of large RF parts available as one-off surplus bargains for individual constructors. It would be an interesting project to strip down a smart modern auto-ATU, ignore the on-board RF parts, and use the bare board as the controller for a much larger home-built ATU (using the same L and C values but with much higher RF voltage and current ratings).

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2280. Re: Antenna book

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 09:53:48 UTC
From: "Anonymous." <me@privacy.net>
Message-ID: <feq4jd$e62$1@aioe.org>
Source record: 35462

"Dave" <someplace@nowhere-nice.com> wrote in message
news:47107a6c@212.67.96.135...

> My background is quite close to their target audance - I did an MSc degree
> in "Microwaves and Optoelectronics", and one of the options I took during
> that MSc was "Antennas and Radar".
>
> Yet I'm the first to admit, I find the theory in these sort of books very
> hard at times.

So much for engineering PhDs these days.

2281. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 09:58:11 UTC
From: oriel36 <kelleher.gerald@gmail.com>
Message-ID: <1192269491.586887.315730@e34g2000pro.googlegroups.com>
Source record: 35463
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

On 12 Oct, 22:48, Cecil Moore <nos...@w5dxp.com> wrote:
> oriel36 wrote:
> > Ah,who am I kidding,you are into warped space.time travel ect and who
> > knows what else.
>
> How can I believe in time-travel when I don't believe
> that time even exists?

Funny,funny funny !,Cecil,I like you but you are not as funny as
Albert.

"Now he has departed from this strange world a little ahead of me.
That means nothing. People like us, who believe in physics, know that
the distinction between past, present, and future is only a stubbornly
persistent illusion." Albert

Strange world indeed ! and it there is not the slightest sign that
humanity has outgrown junk like that,relativity being the sympotroms
of the disease rather than the disease itself (that exists back in a
different era).

Some changes are reversible
> and some are not. If you want to consider a reversed
> change to be time travel be my guest, but I don't
> buy it.
> --
> 73, Cecil http://www.w5dxp.com

Buy indeed !.

Would you care to buy a container load of dark matter,I am doing a
special on it this week, $20 000 dollars a cubic foot,cash only .

Thanks Cecil for the laugh,you seem content to live in the imagination
of others and especially the astrological framework of Flamsteed/
Newton so as long as you are happy then that is all that counts.

2282. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 10:55:42 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Ou1Qi.256$GM2.179@trndny02>
Source record: 35464

"art" <aunwin@insightbb.com> wrote in message
news:1192149475.779920.171000@k35g2000prh.googlegroups.com...
> If he understood Gaussian law then he could have made the Gaussian
> antenna
> which requires an element in equilibrium which means a FULL
> WAVELENGTH.
> I know you dislike the meaning of the term equilibrium b ut here it
> is
> indispesable.

you contradict yourself now... you told us before that you used half
wavelength elements for you 'gaussian' antenna????

> Even without the knoweledge of Gauss he came very close to Gauss
> or the biggest discovery of the century
> If one winds a half wave length in a clockwise direction starting
> at the top going down and then repeating with another halfwave length
> but winding it in a counterclockwise direction(preferably winding
> both
> wires at the same time) and then joining together the two wires at the
> top
> he would then have a copy of my Gaussian antenna.

Another contradiction. earlier you have said that the 'gaussian' elements
were simple straight halfwave elements????

and ONE MORE TIME.... define 'equilibrium'. write the equations. just what
is in 'equilibrium' with what??

2283. Help in choosing a beam

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 11:05:31 UTC
From: jam <wa3ymm_pa@verizon.net>
Message-ID: <uf91h3l2uq8pkgdjapqjio2o8vfjbimjgc@4ax.com>
Source record: 35465

Hello All!

I am planning to put up my first tower and beam, the tower 25g braced to the house at 20 feet 45 ft tall and a Yaesu 800ga rotator.

The Problem!

What Beam to put on top?

I have done my home work and currently trying to decide.

3 element Stepper IR (Looks good but, pricy! On the negative, if a wire bus comes lose or breaks your SOL)

Mosley ta-63 (all band but no f/b)

Mosley classic cl 33 + warc (Looks sturdy but, traps, no gain on 17 meters)

Sommer (looks good but a bit of Rube Goldburg + Heavy)

Force 12 (pop ribits and tuners ???????)

Tennadyne (same gain as 2 element yagi big! Swr)

I hope to here what the opinions are.

Thanks All

WA3YMM

2284. Re: Help in choosing a beam

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 11:30:13 UTC
From: Dave <noone@nowhere.com>
Message-ID: <9%1Qi.587$2h2.245@trndny01>
Source record: 35466

"jam" <wa3ymm_pa@verizon.net> wrote in message
news:uf91h3l2uq8pkgdjapqjio2o8vfjbimjgc@4ax.com...
> Hello All!
>
> I am planning to put up my first tower and beam, the tower 25g braced
> to the house at 20 feet 45 ft tall and a Yaesu 800ga rotator.
>
> The Problem!
>
> What Beam to put on top?
>
> I have done my home work and currently trying to decide.
>
> 3 element Stepper IR (Looks good but, pricy! On the negative, if a
> wire bus comes lose or breaks your SOL)
>
> Mosley ta-63 (all band but no f/b)
>
> Mosley classic cl 33 + warc (Looks sturdy but, traps, no gain on 17
> meters)
>
> Sommer (looks good but a bit of Rube Goldburg + Heavy)
>
> Force 12 (pop ribits and tuners ???????)
>
> Tennadyne (same gain as 2 element yagi big! Swr)
>
> I hope to here what the opinions are.
>
> Thanks All
>
> WA3YMM

all multi-band antennas are a compromise. its up to you to make the
tradeoffs and pick one that fits your budget and provides the band coverage
you want.

oh, there is one other drawback on the steppir... long delivery time. i am
just about to leave to help a friend put up his that just came in last week,
and he ordered it at Dayton in the spring. if you want to have something up
for winter that may be a problem. if you are planning for spring you should
make it.

2285. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 12:54:12 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192280052.746235.244950@e34g2000pro.googlegroups.com>
Source record: 35467

On 13 Oct, 03:55, "Dave" <no...@nowhere.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1192149475.779920.171000@k35g2000prh.googlegroups.com...
>
> > If he understood Gaussian law then he could have made the Gaussian
> > antenna
> > which requires an element in equilibrium which means a FULL
> > WAVELENGTH.
> > I know you dislike the meaning of the term equilibrium b ut here it
> > is
> > indispesable.
>
> you contradict yourself now... you told us before that you used half
> wavelength elements for you 'gaussian' antenna????

Hi David, back to your old tricks again eh?
If you go up a halfwave length and then come down a halfwaveleng you
then
have 2 x 1/2 so you don't have a half wave length anymore.
Watch the childrens hour on TV for the answer

>
> > Even without the knoweledge of Gauss he came very close to Gauss
> > or the biggest discovery of the century
> > If one winds a half wave length in a clockwise direction starting
> > at the top going down and then repeating with another halfwave length
> > but winding it in a counterclockwise direction(preferably winding
> > both
> > wires at the same time) and then joining together the two wires at the
> > top
> > he would then have a copy of my Gaussian antenna.

>
> Another contradiction. earlier you have said that the 'gaussian' elements
> were simple straight halfwave elements????

You have just got to watch childrens hour to get up to speed for your
mathematics, new math that is.

A gaussian antenna can be any shape, size or configuration as long as
it is in a state of equilibrium

>
> and ONE MORE TIME.... define 'equilibrium'. write the equations. just what
> is in 'equilibrium' with what??

No David I am not going to go thru all that again,get yourself a
physics book or Google around
Art

2286. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 13:28:42 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <feqh6f$3vi$1@aioe.org>
Source record: 35468

"Dave" wrote
> and ONE MORE TIME.... define 'equilibrium'. write the equations.
> just what is in 'equilibrium' with what??

Art posted his definition in this thread on Oct 11. But no math
to support it.

\\ If he understood Gaussian law then he could have made the Gaussian
antenna which requires an element in equilibrium which means a
FULLWAVELENGTH. I know you dislike the meaning of the term equilibrium but
here it is indispesable. //

What I get from his comments is that Art believes fractional wavelength
radiators are inefficient because they are not in equilibrium, ie, they are
not a full wave length and therefore don't act like a tank circuit (he
says) -- which he believes is necessary for efficient radiation.

I've sent Art several emails with NEC results and math-based discussion
showing that a 1/4-wave monopole working against a 2-ohm r-f ground plane
radiates about 95% of the power applied by a matched source between it base
feedpoint and r-f ground. This is the configuration used by virtually all
commercial AM broadcast stations, and its very high system radiation
efficiency has been proven thousands of times since the earliest days of
broadcasting. Of course that is at odds with the beliefs Art continues to
post here and elsewhere.

In a response to my emails Art seemed to understand, and even thanked me for
"sticking with it." But I guess he was not convinced, because he started
this thread _after_ our email exchange.

Since my discussions with Art I put together a chart showing the groundwave
field generated at 1 km by several, fractional wavelength monopoles at
applied powers from 1-10 kW (see link below). I used a perfect ground plane
in preparing the chart, but the values would be only slightly less with a
2-ohm r-f ground.

ART: Note that the 1 kW field for the 1/4-wave monopole is exactly the peak
field of a 1/2-wave dipole in free space (about 313 mV/m). Taller
monopoles generate more groundwave field, given the same applied power and
r-f ground, because their radiation patterns have more gain in the
horizontal plane and less gain in other directions -- not because they are
more "efficient." All of the monopoles in this chart radiate all of the
power applied to them (100% efficient).

Also note, Art, that a 1/2-wave monopole and its ground image comprise a
full-wave antenna (eg, having your "equilibrium"), yet the 195-degree and

225-degree monopoles produce higher groundwave fields, even though they are
NOT by your definition "in equilibrium."

http://i62.photobucket.com/albums/h85/rfry-100/GroundwaveFieldvsPowerandRadiator10.gif

RF

2287. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 15:43:11 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192290191.731000.198320@q5g2000prf.googlegroups.com>
Source record: 35469

On 13 Oct, 06:28, "Richard Fry" <r...@adams.net> wrote:
> "Dave" wrote> and ONE MORE TIME.... define 'equilibrium'. write the equations.
> > just what is in 'equilibrium' with what??
>
> _____
>
> Art posted his definition in this thread on Oct 11. But no math
> to support it.
>
> \\ If he understood Gaussian law then he could have made the Gaussian
> antenna which requires an element in equilibrium which means a
> FULLWAVELENGTH. I know you dislike the meaning of the term equilibrium but
> here it is indispesable. //
>
> What I get from his comments is that Art believes fractional wavelength
> radiators are inefficient because they are not in equilibrium, ie, they are
> not a full wave length and therefore don't act like a tank circuit (he
> says) -- which he believes is necessary for efficient radiation.
>
> I've sent Art several emails with NEC results and math-based discussion
> showing that a 1/4-wave monopole working against a 2-ohm r-f ground plane
> radiates about 95% of the power applied by a matched source between it base
> feedpoint and r-f ground. This is the configuration used by virtually all
> commercial AM broadcast stations, and its very high system radiation
> efficiency has been proven thousands of times since the earliest days of
> broadcasting. Of course that is at odds with the beliefs Art continues to
> post here and elsewhere.
>
> In a response to my emails Art seemed to understand, and even thanked me for
> "sticking with it." But I guess he was not convinced, because he started
> this thread _after_ our email exchange.
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> Since my discussions with Art I put together a chart showing the groundwave
> field generated at 1 km by several, fractional wavelength monopoles at
> applied powers from 1-10 kW (see link below). I used a perfect ground plane
> in preparing the chart, but the values would be only slightly less with a
> 2-ohm r-f ground.
>
> ART: Note that the 1 kW field for the 1/4-wave monopole is exactly the peak
> field of a 1/2-wave dipole in free space (about 313 mV/m). Taller
> monopoles generate more groundwave field, given the same applied power and
> r-f ground, because their radiation patterns have more gain in the
> horizontal plane and less gain in other directions -- not because they are
> more "efficient." All of the monopoles in this chart radiate all of the

> power applied to them (100% efficient).
>
> Also note, Art, that a 1/2-wave monopole and its ground image comprise a
> full-wave antenna (eg, having your "equilibrium"), yet the 195-degree and
> 225-degree monopoles produce higher groundwave fields, even though they are
> NOT by your definition "in equilibrium."
>
> http://i62.photobucket.com/albums/h85/rfry-100/GroundwaveFieldvsPower...
>
> RF

When you said if the Gaussian antenna was real it would have been
invented long ago
or something like that and yet they are still giving out patents and
Nobel
prizes out for things that are newly discovered I lost interest in
your musings.
When you added things like an image is real I have to walk away
because you are
just not on my wavelength. I fed the half wave image and also hooked
it
up to a receiver and I heard nothing, let me know when you make a
contact
or maybe I should dig a little bit deeper!
Art
Art

2288. Re: Best Multiband HF Vertical on a roof Options

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 15:51:52 UTC
From: Pat Whelton <pwhelton@earthlinkNOSPAM.net>
Message-ID: <13h1qcu9d739r70@corp.supernews.com>
Source record: 35470

> Can anyone recommend a verical antenna that i can mount on the roof
> of
> my 3 story house that works from 80m upwards and wont upset the
> nighbours (too much). >
> Thanks
>
> Andiroo

My son mounted a 5BTV on a 25' push-up mast with 4 elevated radials for 40-10 mtrs and 2 radials for 80 mtrs (22 total radials). We later added the 30 meter mod and it's now essentially a 6BTV. This antenna works like gang busters on 30, 40 and 80 meters. We don't use it much on 20, 15 and 10 because we have other antennas for those bands. Your mileage may vary but from my experience if you can get the 5BTV off the ground and put some elevated radials under it it will perform very nicely for you especially if you like low band DX and don't have a lot of room for antennas.

Regards,

Pat - KZ5J

2289. Re: B&W End-Fed Vee HF Antenna questions.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 16:04:03 UTC
From: "David G. Nagel" <nagel.david@sbcglobal.net>
Message-ID: <T%5Qi.12771$JD.11817@newssvr21.news.prodigy.net>
Source record: 35471

Skipp says please no spam wrote:
> Anyone ever taken a moment to measure the values of the balun and
> termination network in a B&W End-Fed Vee HF Antenna?
>
> http://www.bwantennas.com/ama/veeant.ama.htm
>
> I'm curious if the Balun is 1:1 and if you've measured the value
> the resistive value of the balance network at the end of the wire is?
>
> Your replies and thoughts as to how this antenna works?
>
> thanks
> skipp
>
> skipp025 at yahoo.com

Skipp;

According to the pricing list on the B&W web site it is 600 ohms.

Dave WD9BDZ

2290. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 17:23:41 UTC
From: Dave <noone@nowhere.com>
Message-ID: <xa7Qi.797$hI1.743@trndny06>
Source record: 35472

"art" <aunwin@insightbb.com> wrote in message
news:1192290191.731000.198320@q5g2000prf.googlegroups.com...
> On 13 Oct, 06:28, "Richard Fry" <r...@adams.net> wrote:
>> "Dave" wrote> and ONE MORE TIME.... define 'equilibrium'. write the
>> equations.
>> > just what is in 'equilibrium' with what??
>>
>> __________
>>
>> Art posted his definition in this thread on Oct 11. But no math
>> to support it.
>>
>> \\ If he understood Gaussian law then he could have made the Gaussian
>> antenna which requires an element in equilibrium which means a
>> FULLWAVELENGTH. I know you dislike the meaning of the term equilibrium
>> but
>> here it is indispesable. //
>>
>> What I get from his comments is that Art believes fractional wavelength
>> radiators are inefficient because they are not in equilibrium, ie, they
>> are
>> not a full wave length and therefore don't act like a tank circuit (he
>> says) -- which he believes is necessary for efficient radiation.
>>
>> I've sent Art several emails with NEC results and math-based discussion
>> showing that a 1/4-wave monopole working against a 2-ohm r-f ground plane
>> radiates about 95% of the power applied by a matched source between it
>> base
>> feedpoint and r-f ground. This is the configuration used by virtually
>> all
>> commercial AM broadcast stations, and its very high system radiation
>> efficiency has been proven thousands of times since the earliest days of
>> broadcasting. Of course that is at odds with the beliefs Art continues
>> to
>> post here and elsewhere.
>>
>> In a response to my emails Art seemed to understand, and even thanked me
>> for
>> "sticking with it." But I guess he was not convinced, because he started
>> this thread _after_ our email exchange.
>>
>> Since my discussions with Art I put together a chart showing the
>> groundwave
>> field generated at 1 km by several, fractional wavelength monopoles at

>> applied powers from 1-10 kW (see link below). I used a perfect ground
>> plane
>> in preparing the chart, but the values would be only slightly less with a
>> 2-ohm r-f ground.
>>
>> ART: Note that the 1 kW field for the 1/4-wave monopole is exactly the
>> peak
>> field of a 1/2-wave dipole in free space (about 313 mV/m). Taller
>> monopoles generate more groundwave field, given the same applied power
>> and
>> r-f ground, because their radiation patterns have more gain in the
>> horizontal plane and less gain in other directions -- not because they
>> are
>> more "efficient." All of the monopoles in this chart radiate all of the
>> power applied to them (100% efficient).
>>
>> Also note, Art, that a 1/2-wave monopole and its ground image comprise a
>> full-wave antenna (eg, having your "equilibrium"), yet the 195-degree and
>> 225-degree monopoles produce higher groundwave fields, even though they
>> are
>> NOT by your definition "in equilibrium."
>>
>> http://i62.photobucket.com/albums/h85/rfry-100/GroundwaveFieldvsPower...
>>
>> RF
>
> When you said if the Gaussian antenna was real it would have been
> invented long ago
> or something like that and yet they are still giving out patents and
> Nobel
> prizes out for things that are newly discovered I lost interest in
> your musings.
> When you added things like an image is real I have to walk away
> because you are
> just not on my wavelength. I fed the half wave image and also hooked
> it
> up to a receiver and I heard nothing, let me know when you make a
> contact
> or maybe I should dig a little bit deeper!
> Art
> Art
>

the basic problem is art that you forget we had a long conversation about what a 'gaussian' antenna in your dream was. and you specifically said a single halfwave dipole was a 'gaussian' antenna. you can go back and search if you like, but i doubt that you will since you have now changed your imaginary antenna. please art, go take a long walk... a very long walk, the fresh air may do you good.

2291. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 17:26:58 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192296418.613102.183760@i38g2000prf.googlegroups.com>
Source record: 35473

On 13 Oct, 06:28, "Richard Fry" <r...@adams.net> wrote:
> "Dave" wrote> and ONE MORE TIME.... define 'equilibrium'. write the equations.
> > just what is in 'equilibrium' with what??
>
> _____
>
snip commercial AM broadcast stations, and its very high system
radiation
> efficiency has been proven thousands of times since the earliest days of
> broadcasting. Of course that is at odds with the beliefs Art continues to
> post here and elsewhere.
>
> In a response to my emails Art seemed to understand, and even thanked me for
> "sticking with it." But I guess he was not convinced, because he started
> this thread _after_ our email exchange.

RF
When a person E mails me in private he is suggesting an element of
trust
ie that it is private. When you betray that trust you can forget
about
any future discussion, private by E mail or public via the group
Art
>
> Since my discussions with Art I put together a chart showing the groundwave
> field generated at 1 km by several, fractional wavelength monopoles at
> applied powers from 1-10 kW (see link below). I used a perfect ground plane
> in preparing the chart, but the values would be only slightly less with a
> 2-ohm r-f ground.
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> ART: Note that the 1 kW field for the 1/4-wave monopole is exactly the peak
> field of a 1/2-wave dipole in free space (about 313 mV/m). Taller
> monopoles generate more groundwave field, given the same applied power and
> r-f ground, because their radiation patterns have more gain in the
> horizontal plane and less gain in other directions -- not because they are
> more "efficient." All of the monopoles in this chart radiate all of the
> power applied to them (100% efficient).
>
> Also note, Art, that a 1/2-wave monopole and its ground image comprise a
> full-wave antenna (eg, having your "equilibrium"), yet the 195-degree and
> 225-degree monopoles produce higher groundwave fields, even though they are
> NOT by your definition "in equilibrium."
>
> http://i62.photobucket.com/albums/h85/rfry-100/GroundwaveFieldvsPower...

>
> RF

2292. Re: Help in choosing a beam

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 17:28:05 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <f8ednXLQCqOLnYzanZ2dnUVZ_h2pnZ2d@comcast.com>
Source record: 35474

"jam" <wa3ymm_pa@verizon.net> wrote in message
news:uf91h3l2uq8pkgdjapqjio2o8vfjbimjgc@4ax.com...
> Hello All!
>
> I am planning to put up my first tower and beam, the tower 25g braced
> to the house at 20 feet 45 ft tall and a Yaesu 800ga rotator.
>
> The Problem!
>
> What Beam to put on top?
>
> I have done my home work and currently trying to decide.
>
> 3 element Stepper IR (Looks good but, pricy! On the negative, if a
> wire bus comes lose or breaks your SOL)
>
> Mosley ta-63 (all band but no f/b)
>
> Mosley classic cl 33 + warc (Looks sturdy but, traps, no gain on 17
> meters)
>
> Sommer (looks good but a bit of Rube Goldburg + Heavy)
>
> Force 12 (pop ribits and tuners ???????)
>
> Tennadyne (same gain as 2 element yagi big! Swr)
>
> I hope to here what the opinions are.
>
> Thanks All
>
> WA3YMM

I am completely happy with my Hygain TH3Mk4 at 40 feet, which replaced a Mosley TA33Jr (semi useless). The first day I had it up I worked 3 new countries in the Far East on 15 SSB. On at least one occasion I had Europeans on 20 tell me I had the strongest signal from North America at that time. Duce (sp?) Island came back on the third call.

Tam/WB2TT

2293. Re: Antenna book

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 17:56:05 UTC
From: Dave <someplace@nowhere-nice.com>
Message-ID: <471106b5@212.67.96.135>
Source record: 35475

Anonymous. wrote:
> "Dave" <someplace@nowhere-nice.com> wrote in message
> news:47107a6c@212.67.96.135...
>
>> My background is quite close to their target audance - I did an MSc degree
>> in "Microwaves and Optoelectronics", and one of the options I took during
>> that MSc was "Antennas and Radar".
>>
>> Yet I'm the first to admit, I find the theory in these sort of books very
>> hard at times.
>
> So much for engineering PhDs these days.
>
>

My Ph.D is in medical physics

2294. Re: Antenna book

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 17:59:52 UTC
From: "Anonymous." <me@privacy.net>
Message-ID: <fer12p$hn9$1@aioe.org>
Source record: 35476

"Dave" <someplace@nowhere-nice.com> wrote in message
news:471106b5@212.67.96.135...
> Anonymous. wrote:
>> "Dave" <someplace@nowhere-nice.com> wrote in message
>> news:47107a6c@212.67.96.135...
>>> My background is quite close to their target audance - I did an MSc
>>> degree in "Microwaves and Optoelectronics", and one of the options I
>>> took during that MSc was "Antennas and Radar".
>>> Yet I'm the first to admit, I find the theory in these sort of books
>>> very hard at times.
>> So much for engineering PhDs these days.
> My Ph.D is in medical physics

So much for physics PhDs these days.

2295. new email address

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 18:16:24 UTC
From: Ron in Radio Heaven <W4RON@Xcarolina.rr.com>
Message-ID: <47110b98$0$28873$4c368faf@roadrunner.com>
Source record: 35477

I've changed my amateur call sign to W4RON.

I have a new email address to go with it,
which is W4RON@SPAMcarolina.rr.com

Remove the SPAM to use this address.

73, Ron, W4RON

2296. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 19:27:17 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fer66q$15s$1@aioe.org>
Source record: 35478

"art" wrote
> Back to the Vincent antenna, he has designed an antenna that is
> shorter than that known before. .... The input impedance is an
> advantage over similar antennas and at the same time not
> requiring a ground plain without being a problem to the transmitter.
> He is also radiating well in comparison to the height of antenna and
> the radiating system has the appearance of being efficient.

Probably you'll agree that good, new antenna designs need more
than "the appearance of being efficient." Let's expand on this..

The link below leads to a calculation of the system radiation efficiency and r-f bandwidth of a conventional, 30-degree, base-loaded monopole, using the equations found in standard antenna engineering texts. This is the physical height used for the "standard DLM" antennas tested by the Navy for the University of Rhode Island. The coil and r-f ground loss was set to 2 ohms, total, to approximate the conditions in the U-RI test.

This non-DLM configuration of a short monopole has a system radiation efficiency of about 59%, and for 1 kW of applied power generates an inverse distance groundwave field of 241 mV/m at 1 km.

A standard, 1/4-wave vertical monopole with a matching network and r-f ground loss of 2 ohms, total, is about 95% efficient, and for 1 kW of applied power generates an inverse distance groundwave field of about 306 mV/m at 1 km.

So the field of the 30-degree radiator is about 2.07 dB below that of the 90-degree radiator -- and that is due mostly to the much lower radiation resistance of the 30-degree radiator (about 2.9 ohms vs about 36 ohms) against the 2 ohms of other losses in each system.

The March 31, 2005 U-RI test report states that the 3.5 MHz standard DLM had a measured groundwave field at 1 mile that was 2.33 dB less than the Navy's reference monopole (whose electrical height is not stated, but presumably is 90 degrees). So the measured h-plane gain of that DLM was about 0.26 dB _less_ than a conventional, base-loaded, 30-degree monopole -- although that difference could be within the range of measurement and/or modeling error.

Also note, Art, that the DLM needs a good r-f ground, just as do all monopoles, and especially short ones. The Navy went to great effort to provide a very good r-f ground and propagation path for the range where the DLM was tested.

http://i62.photobucket.com/albums/h85/rfry-100/ShortMonopole.gif

RF

2297. Splitting a Scanner Antenna's Feed ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 20:39:32 UTC
From: Robert11 <rgsros@notme.com>
Message-ID: <YeOdnWdCC6jksYzanZ2dnUVZ_jWdnZ2d@comcast.com>
Source record: 35479

Hello,

Have a scanner in which I listen from 25 MHz or so up thru the vhf and uhf scanner frequencies of 1.3 GHz.
Presently, one desktop scanner connected full time to one Scantenna in attic.

Will be buying a handheld scanner, which I will be using (when not being used in a mobile mode) in probably one of three other rooms in house.

I would like to connect a new antenna in the attic also, but have coax brought split out to the three rooms
as ports for the handheld to be plugged into.

Only one of the three ports will ever be used at any time.

a. Do I need a "Coupler" between the three branches from the new antenna's feed ?

b. If not, will the two Unused ports need to be terminated, or is just hanging open fine ?

c. Anything else I should probably be asking about this proposed setup ?

Thanks,
Bob

2298. Re: Antenna book

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 21:13:23 UTC
From: Dave <someplace@nowhere-nice.com>
Message-ID: <471134f5@212.67.96.135>
Source record: 35480

Anonymous. wrote:

>>> So much for engineering PhDs these days.
>> My Ph.D is in medical physics
>
> So much for physics PhDs these days.
>
>

It is *NOT* in physics either - it is in medical physics, which is a
discipline of its own.

http://www.medphys.ucl.ac.uk/research/borl/homepages/davek/phd/phd.html

2299. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 23:41:25 UTC
From: pa3abk <pa3abk@tenalp.ln>
Message-ID: <nck2h39pioka6d2l0ej7uc063lv75t18jl@4ax.com>
Source record: 35481

On Fri, 12 Oct 2007 20:03:08 -1000, Tony Giacometti
<TonyGiacometti@gmail.com> wrote:

>JIMMIE wrote:
>
>> On Oct 11, 1:38 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
>>> I live in a neighborhood that as the years have gone on
>>> has added a number of new homes. This has increased the
>>> electrical "noise" for me where S1 or S2 on 80 meters 6-8 yrs ago
>>> is now S7 to S9. At this point in time I don't have the room for a K9AY
>>> setup. I can only "dream" of a beverage.
>>>
>>> I have a Timewave ANC-4 which works very well on 40 meters as I can null
>>> out ALL the "noise".
>>>
>>> Not so on 80 meters as it only knocks it down 2 S Units.
>>> At best I have an S-6 noise level.
>>>
>>> This leads me to believe that I need a separate sensing antenna for 80
>>> meters. Anyone have any ideas for this problem? Is this thinking correct?
>>>
>>> I have been looking at low noise receiving loops and other low noise
>>> antennas. Wellbrook athttp://www.wellbrook.uk.com/seems to have some
>>> interresting possibilities, but some of the reviews I have read have made
>>> me hesistant to purchase any of their products.
>>>
>>> What I need is some serious input from anyone who has any experience and
>>> knowledge in dealing with low band noise issues.
>>> As I am now space limited due to all the new neighbors any solution would
>>> need to take this into consideration.
>>>
>>> TIA
>>
>> Just out of curiosity, have you tried locating the noise source. I had
>> the same experience you are having more or less.
>> I had been away from ham radio for a couple of years and when I fired
>> it all up again HF was really noisy so I ran the radio off of battery
>> while I shut down power to my house. I found the source of the noise
>> was the display on my microwave oven.
>> Short term solution was keeping the microwave unplugged until needed.
>> Long term solution was replacing the microwave. I did this when i
>> found a better one at Goodwill for less than $20. Also check for RF on
>> the coax during transmit. During rx this means the antenna is also
>> picking up signals from the shield which may be in close proximity to

>> noise generators.
>>
>>
>> Jimmie
>
>
>I did a good assessment of the noise being heard here.
>I found an electric razor charger that was some of the problem and
>a computer printer was another I found.
>So my home is quite clean unless something else has popped up which I don't
>know about and can't locate.
>
>I test with power on and power off. Right now theres very little difference
>if any between the two.
>
>I would think its coming from someplace else, but until I can come up with
>the exact location I need to decide on a solution thats effective.
Understand your problem. In the Netherlands we live rather dense to
each other. Consequently when you are a ham and try to receive
something you are confronted with a blanket of man-made noise from
various sources. Mainly they are coming from switched power supplies
in some kind. It's almost impossible to adress all neighbours and
de-noise the equipment. In NL the responsible salesman should remove
these kind of QRM, you will imagine that it will cost a lot of effort
convince him that his product is causing the problem. To get around,
you can sample the noise, reverse it and add it to your antenna
signal. The QRM is simply nulled out. The earlier mentioned ANC-4 is
doing that, however I understood it's not capable to to do the job
very well. Same goes for the MFJ-1025.
Have a look at the page of pa0sim
http://www.pa0sim.nl/Phaser%2080%20-%2010%20meters.htm
Don't worry it's in English and it gives you some ideas how you can
tackle the noise/qrm problem.
If have your QRM sensor is correctly placed for picking up the "noise"
and feedback it, it should do the trick. Alternatively, for those who
have not the man made noise problem, you can null-out a short skip
station in favour of that DX station you would like to work.
Jan/pa3abk

2300. Re: Antenna book

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-13 23:56:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9nm2h3908l9glbnqvsj89lutecvcspja32@4ax.com>
Source record: 35482

On Sat, 13 Oct 2007 22:13:23 +0100, Dave <someplace@nowhere-nice.com>
wrote:

>
>http://www.medphys.ucl.ac.uk/research/borl/homepages/davek/phd/phd.html

Hi Dave,

Interesting thesis.

73's
Richard Clark, KB7QHC

2301. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 00:27:01 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1192321621.503675.218310@q5g2000prf.googlegroups.com>
Source record: 35483

Frnak McKenney wrote:
> I'm in Richmond, Virginia and I'm trying to noticeably improve my
> reception of WWV's 10MHz signal from Fort Collins, Colorado. It all
> seemed so simple, two weeks ago: wind some wire, solder a
> connector, and Hey...presto! a clean WWV signal. <grin!>
>
> It wasn't so simple, and I'm afraid I've let it become an "ego
> thing" (see also: resource sink). I've outlined the problem below
> in the hope that someone can either suggest something I haven't
> already tried, or even point out something really dumb that I've
> been doing and shouldn't keep doing. <grin!>
>
>
> Background
> ----------
>
> Several years back I inherited a Heathkit GCW-1001 Most Accurate
> Clock II from my father. This is an update to it's predecessor,
> Heath's GC-1000 Most Accurate Clock; its circuit, built around a
> Philips TDA1072A AM receiver IC and an 87C52 microprocessor,
> monitors WWV's 10MHz signal and decodes the BCD-coded 100Hz
> subcarrier (details at http://tf.nist.gov/stations/wwv.html) to keep
> the MAC-II accurate.
>
> This MAC-II worked fine for my father: he had a 30 meter dipole of
> some kind in the attic, above the second floor of a house on a hill.
> For him, WWV's 10MHz signal from Fort Collins came in regular as...
> well, "clockwork". <igg!>
>
> For me, in a one-story-plus-basement, in a low spot in a river
> valley, it's a different story. The GCW-1001 has a stack-o-LEDs
> signal strength indicator driven by the TDA1072's AGC output; it
> would wander between 2 and 4 LEDs with my 40" indoor dangling wire
> antenna, and it could take weeks or months for atmospheric
> conditions to randomly improve the signal to where the GCW-1001
> could "lock in" a time.
>
> Two weeks ago, in a fit of madness, I decided to try building a
> better antenna, one which would let the clock lock onto WWV at
> least, say, once a week. The tuned-loop antenna I've built _has_
> increased the signal -- I'm seeing 4-5 LEDs lit on a regular basis,
> and 6 on occasion -- but the clock still isn't sync'ing to WWV's
> time signal. The clock face remains at a cute(?) 7-segment "not
> SEt" display. And what seems to be louder is the carrier -- or _a_

> carrier, at any rate -- but not the tones or the human voice time
> callout coming out of the GCW-1001's speaker.
>
> I seem to be up to my assets in alligators, and the swamp doesn't
> seem to be draining much.
>
>
> Problem
> -------
>
> My main problem is that, although the GCW-1001's LED "Signal" stack
> _says_ it's getting a stronger signal, what I hear through the
> speaker monitor isn't _clearer_. There are long periods when I
> cannot hear any WWV tones through the GC-1001's speaker, the
> tones/ticks are faint even when there are 5-6 LEDs lit, and the
> voice is almost never audible/distinguishable. The clock _seems_ to
> be sync-ing a little more often (it's done it four times in the past
> two weeks), but I had hoped it might happen a _little_ more
> frequently.
>
> Am I asking too much? Is WWV's 10MHz signal from (say) 2,000 miles
> away, simply too weak to pick up solidly without an outdoor antenna?
>
>
> What I've tried
> ---------------
>
> My (second) attempt at a 30m indoor loop antenna:
>
> Main loop (tuned): A 36" near-circle of #12 insulated house wire
> with an AM/FM tuning capacitor across it.
>
> Pickup loop: One (36") turn of #27 magnet wire taped to the #12
> loop with electrical tape<grin!>. The ends (scraped and tinned)
> are tied to the GCW-1001's 50ohm antenna input with a couple of
> 12" clip leads and a 3' section of coax.
>
> The loops are mounted on (and held in shape by) a 1'x4'x0.5"
> "backboard" made of "blue foam" house insulation that I found in my
> basement; the loops are held in place by small plastic cable ties.
> The foam backing is resting against a (roughly) N-S wall, which
> _should_ orient the loop plane across the WWV wavefront for maximum
> pickup.
>
> Does this sound like a reasonable attempt at a tuned 10MHz loop?
>
> Is there any reason to believe that the foam backing would affect
> the loop inductance? I'm assuming it's a good insulator and nothing
> more, but that's an assumption.
>

> Is it possible that I'm picking up a non-WWV dignal so strong that
> it's masking WWV? I tried tuning around 10MHz with a shortwave
> radio; it didn't find WWV -- not a particularly hopeful sign -- but
> it did pick up a station called (IIRC) WWCR. WWCR's 'web site
> (www.wwcr.com) lists its transmitter #4 as using 9.985MHz and
> 9.975MHz between 0900 and 2100 CST.
>
> Any advice or suggestions will be appreciated, up to and including
> "You can't power a hedge trimmer from two AAA cells!".
>
> Thanks...

Frank -
I am up in Maryland, not too far from you.

WWV on 10MHz is only usable for about a third or less of the day for locking an electronic clock. Generally the late afternoons and evenings are great, early afternoons and mornings are a little more variable.

Overnight 5MHz works best. During the mid-day 15MHz or when propogation permits 20MHz rules for WWV. I don't think your Heath has any frequency diversity capability, right? Well, 10MHz is a pretty good choice if you only have a choice of one, it is usually coming in strong in the evenings there. Over wintertime 5MHz gets pretty good at night.

You will, especially in the early morning, occasionally hear WWVH on 10MHz or 5MHz or 15MHz. Sometimes I hear both WWV and WWVH at the same time. You can recognize WWVH by the woman's voice reading the time.

My best antenna for 10MHz WWV is my 40-meter dipole strung between two trees. Mine mostly points broadside to the NE/SW but if you could arrange it, it would be slightly preferable to have it broadside to be sensitive to the W.

A dipole optimized for 10MHz would be even shorter - the formulas put a half wave dipole at 47 feet long.

Tim.

2302. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 00:48:21 UTC
From: "John, N9JG" <john@Xremove.MeYgotwals.com>
Message-ID: <pHdQi.39081$G23.4110@newsreading01.news.tds.net>
Source record: 35484

If you don't mind spending the bucks, you might want to investigate DXengineering's Noise Canceling Controller. See http://www.dxengineering.com/Products.asp?ID={6F07CEB4-27D0-4664-A2AA-352A69ED88CD}&SecID=114&DeptID=12

"pa3abk" <pa3abk@tenalp.ln> wrote in message news:nck2h39pioka6d2l0ej7uc063lv75t18jl@4ax.com...
> On Fri, 12 Oct 2007 20:03:08 -1000, Tony Giacometti
> <TonyGiacometti@gmail.com> wrote:
>
>>JIMMIE wrote:
>>
>>> On Oct 11, 1:38 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
>>>> I live in a neighborhood that as the years have gone on
>>>> has added a number of new homes. This has increased the
>>>> electrical "noise" for me where S1 or S2 on 80 meters 6-8 yrs ago
>>>> is now S7 to S9. At this point in time I don't have the room for a K9AY
>>>> setup. I can only "dream" of a beverage.
>>>>
>>>> I have a Timewave ANC-4 which works very well on 40 meters as I can null
>>>> out ALL the "noise".
>>>>
>>>> Not so on 80 meters as it only knocks it down 2 S Units.
>>>> At best I have an S-6 noise level.
>>>>
>>>> This leads me to believe that I need a separate sensing antenna for 80
>>>> meters. Anyone have any ideas for this problem? Is this thinking correct?
>>>>
>>>> I have been looking at low noise receiving loops and other low noise
>>>> antennas. Wellbrook athttp://www.wellbrook.uk.com/seems to have some
>>>> interresting possibilities, but some of the reviews I have read have made
>>>> me hesistant to purchase any of their products.
>>>>
>>>> What I need is some serious input from anyone who has any experience and
>>>> knowledge in dealing with low band noise issues.
>>>> As I am now space limited due to all the new neighbors any solution would
>>>> need to take this into consideration.
>>>>
>>>> TIA
>>>
>>> Just out of curiosity, have you tried locating the noise source. I had
>>> the same experience you are having more or less.
>>> I had been away from ham radio for a couple of years and when I fired
>>> it all up again HF was really noisy so I ran the radio off of battery

>>> while I shut down power to my house. I found the source of the noise
>>> was the display on my microwave oven.
>>> Short term solution was keeping the microwave unplugged until needed.
>>> Long term solution was replacing the microwave. I did this when i
>>> found a better one at Goodwill for less than $20. Also check for RF on
>>> the coax during transmit. During rx this means the antenna is also
>>> picking up signals from the shield which may be in close proximity to
>>> noise generators.
>>>
>>>
>>> Jimmie
>>
>>
>>I did a good assessment of the noise being heard here.
>>I found an electric razor charger that was some of the problem and
>>a computer printer was another I found.
>>So my home is quite clean unless something else has popped up which I don't
>>know about and can't locate.
>>
>>I test with power on and power off. Right now theres very little difference
>>if any between the two.
>>
>>I would think its coming from someplace else, but until I can come up with
>>the exact location I need to decide on a solution thats effective.
> Understand your problem. In the Netherlands we live rather dense to
> each other. Consequently when you are a ham and try to receive
> something you are confronted with a blanket of man-made noise from
> various sources. Mainly they are coming from switched power supplies
> in some kind. It's almost impossible to adress all neighbours and
> de-noise the equipment. In NL the responsible salesman should remove
> these kind of QRM, you will imagine that it will cost a lot of effort
> convince him that his product is causing the problem. To get around,
> you can sample the noise, reverse it and add it to your antenna
> signal. The QRM is simply nulled out. The earlier mentioned ANC-4 is
> doing that, however I understood it's not capable to to do the job
> very well. Same goes for the MFJ-1025.
> Have a look at the page of pa0sim
> http://www.pa0sim.nl/Phaser%2080%20-%2010%20meters.htm
> Don't worry it's in English and it gives you some ideas how you can
> tackle the noise/qrm problem.
> If have your QRM sensor is correctly placed for picking up the "noise"
> and feedback it, it should do the trick. Alternatively, for those who
> have not the man made noise problem, you can null-out a short skip
> station in favour of that DX station you would like to work.
> Jan/pa3abk

2303. Re: Splitting a Scanner Antenna's Feed ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 01:39:54 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1192325994.030682.263350@v29g2000prd.googlegroups.com>
Source record: 35485

On Oct 13, 1:39 pm, "Robert11" <rgs...@notme.com> wrote:
> Hello,
>
> Have a scanner in which I listen from 25 MHz or so up thru the vhf and uhf
> scanner frequencies of 1.3 GHz.
> Presently, one desktop scanner connected full time to one Scantenna in
> attic.
>
> Will be buying a handheld scanner, which I will be using (when not being
> used in a mobile mode) in probably one of three other rooms in house.
>
> I would like to connect a new antenna in the attic also, but have coax
> brought split out to the three rooms
> as ports for the handheld to be plugged into.
>
> Only one of the three ports will ever be used at any time.
>
> a. Do I need a "Coupler" between the three branches from the new antenna's
> feed ?
>
> b. If not, will the two Unused ports need to be terminated, or is just
> hanging open fine ?
>
> c. Anything else I should probably be asking about this proposed setup ?
>
> Thanks,
> Bob

At least a splitter that provides some isolation among the ports is a
good idea. If you just parallel three terminated lines and connect
them to antenna output, you'll have some mismatch loss--6dB worth.
And if you forget to terminate one or both unused lines, they'll put
lots of nulls in the frequency response.

A splitter won't give you a whole lot more signal, since 2/3 of the
power goes to the terminated lines: you have a loss of 4.8dB in the
ideal case.

A couple of other options: get an amplifier with three outputs; it's
possible to have very good isolation if the amplifier is done right.
Or...run the cable "daisy-chain" fashion, with a little jumper in the
first two rooms. Remove the jumper and connect to the antenna feed if
you want access in that room. Don't need to worry about terminations
that way, just jumpers. Cable loss starts to add up, especially on
UHF, but if the runs aren't too long, it probably beats the loss of a

splitter.

Cheers,
Tom

2304. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 02:06:49 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <471179b9$0$25686$4c368faf@roadrunner.com>
Source record: 35486

"Richard Fry" <rfry@adams.net> wrote in message
news:fer66q$15s$1@aioe.org...
> "art" wrote
>> Back to the Vincent antenna, he has designed an antenna that is
>> shorter than that known before. .... The input impedance is an
>> advantage over similar antennas and at the same time not
>> requiring a ground plain without being a problem to the transmitter.
>> He is also radiating well in comparison to the height of antenna and
>> the radiating system has the appearance of being efficient.
> __________
>
> Probably you'll agree that good, new antenna designs need more
> than "the appearance of being efficient." Let's expand on this..
>
> The link below leads to a calculation of the system radiation efficiency
> and r-f bandwidth of a conventional, 30-degree, base-loaded monopole,
> using the equations found in standard antenna engineering texts. This is
> the physical height used for the "standard DLM" antennas tested by the
> Navy for the University of Rhode Island. The coil and r-f ground loss was
> set to 2 ohms, total, to approximate the conditions in the U-RI test.
>
> This non-DLM configuration of a short monopole has a system radiation
> efficiency of about 59%, and for 1 kW of applied power generates an
> inverse distance groundwave field of 241 mV/m at 1 km.
>
> A standard, 1/4-wave vertical monopole with a matching network and r-f
> ground loss of 2 ohms, total, is about 95% efficient, and for 1 kW of
> applied power generates an inverse distance groundwave field of about 306
> mV/m at 1 km.
>
> So the field of the 30-degree radiator is about 2.07 dB below that of the
> 90-degree radiator -- and that is due mostly to the much lower radiation
> resistance of the 30-degree radiator (about 2.9 ohms vs about 36 ohms)
> against the 2 ohms of other losses in each system.
>
> The March 31, 2005 U-RI test report states that the 3.5 MHz standard DLM
> had a measured groundwave field at 1 mile that was 2.33 dB less than the
> Navy's reference monopole (whose electrical height is not stated, but
> presumably is 90 degrees). So the measured h-plane gain of that DLM was
> about 0.26 dB _less_ than a conventional, base-loaded, 30-degree
> monopole -- although that difference could be within the range of
> measurement and/or modeling error.
>
> Also note, Art, that the DLM needs a good r-f ground, just as do all

> monopoles, and especially short ones. The Navy went to great effort to
> provide a very good r-f ground and propagation path for the range where
> the DLM was tested.
>
> http://i62.photobucket.com/albums/h85/rfry-100/ShortMonopole.gif
>
> RF
Richard

Seems like I remeber hearing about AM broadcast towers whose ground resistance was less than 1 ohm(built in a marsh). I would think the Navy's installation would be at least this good. Of course this would only further make your point.

Jimmie

2305. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 02:23:58 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <47117dbd$0$25702$4c368faf@roadrunner.com>
Source record: 35487

> http://www.pa0sim.nl/Phaser%2080%20-%2010%20meters.htm

Im updating a homebrew RX I built 30 years ago, perhaps something like this could be included.

Jimmie

2306. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 02:31:14 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <47117f75$0$9581$4c368faf@roadrunner.com>
Source record: 35488

"Tim Shoppa" <shoppa@trailing-edge.com> wrote in message
news:1192321621.503675.218310@q5g2000prf.googlegroups.com...
> Frnak McKenney wrote:
>> I'm in Richmond, Virginia and I'm trying to noticeably improve my
>> reception of WWV's 10MHz signal from Fort Collins, Colorado. It all
>> seemed so simple, two weeks ago: wind some wire, solder a
>> connector, and Hey...presto! a clean WWV signal. <grin!>
>>
>> It wasn't so simple, and I'm afraid I've let it become an "ego
>> thing" (see also: resource sink). I've outlined the problem below
>> in the hope that someone can either suggest something I haven't
>> already tried, or even point out something really dumb that I've
>> been doing and shouldn't keep doing. <grin!>
>>
>>
>> Background
>> ----------
>>
>> Several years back I inherited a Heathkit GCW-1001 Most Accurate
>> Clock II from my father. This is an update to it's predecessor,
>> Heath's GC-1000 Most Accurate Clock; its circuit, built around a
>> Philips TDA1072A AM receiver IC and an 87C52 microprocessor,
>> monitors WWV's 10MHz signal and decodes the BCD-coded 100Hz
>> subcarrier (details at http://tf.nist.gov/stations/wwv.html) to keep
>> the MAC-II accurate.
>>
>> This MAC-II worked fine for my father: he had a 30 meter dipole of
>> some kind in the attic, above the second floor of a house on a hill.
>> For him, WWV's 10MHz signal from Fort Collins came in regular as...
>> well, "clockwork". <igg!>
>>
>> For me, in a one-story-plus-basement, in a low spot in a river
>> valley, it's a different story. The GCW-1001 has a stack-o-LEDs
>> signal strength indicator driven by the TDA1072's AGC output; it
>> would wander between 2 and 4 LEDs with my 40" indoor dangling wire
>> antenna, and it could take weeks or months for atmospheric
>> conditions to randomly improve the signal to where the GCW-1001
>> could "lock in" a time.
>>
>> Two weeks ago, in a fit of madness, I decided to try building a
>> better antenna, one which would let the clock lock onto WWV at
>> least, say, once a week. The tuned-loop antenna I've built _has_
>> increased the signal -- I'm seeing 4-5 LEDs lit on a regular basis,
>> and 6 on occasion -- but the clock still isn't sync'ing to WWV's

>> time signal. The clock face remains at a cute(?) 7-segment "not
>> SEt" display. And what seems to be louder is the carrier -- or _a_
>> carrier, at any rate -- but not the tones or the human voice time
>> callout coming out of the GCW-1001's speaker.
>>
>> I seem to be up to my assets in alligators, and the swamp doesn't
>> seem to be draining much.
>>
>>
>> Problem
>> -------
>>
>> My main problem is that, although the GCW-1001's LED "Signal" stack
>> _says_ it's getting a stronger signal, what I hear through the
>> speaker monitor isn't _clearer_. There are long periods when I
>> cannot hear any WWV tones through the GC-1001's speaker, the
>> tones/ticks are faint even when there are 5-6 LEDs lit, and the
>> voice is almost never audible/distinguishable. The clock _seems_ to
>> be sync-ing a little more often (it's done it four times in the past
>> two weeks), but I had hoped it might happen a _little_ more
>> frequently.
>>
>> Am I asking too much? Is WWV's 10MHz signal from (say) 2,000 miles
>> away, simply too weak to pick up solidly without an outdoor antenna?
>>
>>
>> What I've tried
>> ---------------
>>
>> My (second) attempt at a 30m indoor loop antenna:
>>
>> Main loop (tuned): A 36" near-circle of #12 insulated house wire
>> with an AM/FM tuning capacitor across it.
>>
>> Pickup loop: One (36") turn of #27 magnet wire taped to the #12
>> loop with electrical tape<grin!>. The ends (scraped and tinned)
>> are tied to the GCW-1001's 50ohm antenna input with a couple of
>> 12" clip leads and a 3' section of coax.
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>> The loops are mounted on (and held in shape by) a 1'x4'x0.5"
>> "backboard" made of "blue foam" house insulation that I found in my
>> basement; the loops are held in place by small plastic cable ties.
>> The foam backing is resting against a (roughly) N-S wall, which
>> _should_ orient the loop plane across the WWV wavefront for maximum
>> pickup.
>>
>> Does this sound like a reasonable attempt at a tuned 10MHz loop?
>>
>> Is there any reason to believe that the foam backing would affect
>> the loop inductance? I'm assuming it's a good insulator and nothing

>> more, but that's an assumption.
>>
>> Is it possible that I'm picking up a non-WWV dignal so strong that
>> it's masking WWV? I tried tuning around 10MHz with a shortwave
>> radio; it didn't find WWV -- not a particularly hopeful sign -- but
>> it did pick up a station called (IIRC) WWCR. WWCR's 'web site
>> (www.wwcr.com) lists its transmitter #4 as using 9.985MHz and
>> 9.975MHz between 0900 and 2100 CST.
>>
>> Any advice or suggestions will be appreciated, up to and including
>> "You can't power a hedge trimmer from two AAA cells!".
>>
>> Thanks...
>
> Frank -
> I am up in Maryland, not too far from you.
>
> WWV on 10MHz is only usable for about a third or less of the day for
> locking an electronic clock. Generally the late afternoons and
> evenings are great, early afternoons and mornings are a little more
> variable.
>
> Overnight 5MHz works best. During the mid-day 15MHz or when
> propogation permits 20MHz rules for WWV. I don't think your Heath has
> any frequency diversity capability, right? Well, 10MHz is a pretty
> good choice if you only have a choice of one, it is usually coming in
> strong in the evenings there. Over wintertime 5MHz gets pretty good at
> night.
>
> You will, especially in the early morning, occasionally hear WWVH on
> 10MHz or 5MHz or 15MHz. Sometimes I hear both WWV and WWVH at the same
> time. You can recognize WWVH by the woman's voice reading the time.
>
> My best antenna for 10MHz WWV is my 40-meter dipole strung between
> two trees. Mine mostly points broadside to the NE/SW but if you could
> arrange it, it would be slightly preferable to have it broadside to be
> sensitive to the W.
>
> A dipole optimized for 10MHz would be even shorter - the formulas
> put a half wave dipole at 47 feet long.
>
> Tim.
>

I work on a weather radar that used time data from a WWV rx. the rx was a scanning receiver that would automaticaly switch frequencies when a lock was lost. Sometimes it would go for days without syncing. This got to the point where the WWV rx was replaced with a GPS rx. Problem solved.

Jimmie

2307. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 02:40:24 UTC
From: disk100@comcast.net
Message-ID: <1192329624.364669.262030@q5g2000prf.googlegroups.com>
Source record: 35489

On Oct 13, 9:06 pm, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
> "Richard Fry" <r...@adams.net> wrote in message

http://home.comcast.net/~disk100/waiting.htm

2308. Re: Splitting a Scanner Antenna's Feed ?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 02:41:28 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <471181d9$0$26415$4c368faf@roadrunner.com>
Source record: 35490

"Robert11" <rgsros@notme.com> wrote in message
news:YeOdnWdCC6jksYzanZ2dnUVZ_jWdnZ2d@comcast.com...
> Hello,
>
> Have a scanner in which I listen from 25 MHz or so up thru the vhf and uhf
> scanner frequencies of 1.3 GHz.
> Presently, one desktop scanner connected full time to one Scantenna in
> attic.
>
> Will be buying a handheld scanner, which I will be using (when not being
> used in a mobile mode) in probably one of three other rooms in house.
>
> I would like to connect a new antenna in the attic also, but have coax
> brought split out to the three rooms
> as ports for the handheld to be plugged into.
>
> Only one of the three ports will ever be used at any time.
>
> a. Do I need a "Coupler" between the three branches from the new
> antenna's feed ?
>
> b. If not, will the two Unused ports need to be terminated, or is just
> hanging open fine ?
>
> c. Anything else I should probably be asking about this proposed setup ?
>
> Thanks,
> Bob
>
>
>
>

Ive done exactly waht you are asking about using a splitter and "bullet"
amp from radio shack. TV distribution amps have filters that may not allow
for all the frequencies you want access to. Place the bullet as close to the
antenna as you can get it. You will have to place the power supply before
the splitter or make sure you have a spliter that will pass power through
it.

Jimmie

2309. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 04:26:47 UTC
From: Steve <sdaniel13@speakeasy.net>
Message-ID: <1192336007.785982.207800@i13g2000prf.googlegroups.com>
Source record: 35491

On Oct 13, 8:48 pm, "John, N9JG" <j...@Xremove.MeYgotwals.com> wrote:
> If you don't mind spending the bucks, you might want to investigate DXengineering's Noise Canceling Controller. Seehttp://www.dxengineering.com/Products.asp?ID={6F07CEB4-27D0-4664-A2AA-352A69ED88CD}&SecID=114&DeptID=12
>
>

I'd love to hear from someone who's tried this phasing unit. If it's really light years ahead of the Timewave and MFJ units, I'd say it's worth the bucks.

2310. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 06:15:25 UTC
From: Tony Giacometti <TonyGiacometti@gmail.com>
Message-ID: <N72dne-9Crk4LozanZ2dnUVZ_s_inZ2d@hawaiiantel.net>
Source record: 35492

pa3abk wrote:

> On Fri, 12 Oct 2007 20:03:08 -1000, Tony Giacometti
> <TonyGiacometti@gmail.com> wrote:
>
>>JIMMIE wrote:
>>
>>> On Oct 11, 1:38 pm, Tony Giacometti <TonyGiacome...@gmail.com> wrote:
>>>> I live in a neighborhood that as the years have gone on
>>>> has added a number of new homes. This has increased the
>>>> electrical "noise" for me where S1 or S2 on 80 meters 6-8 yrs ago
>>>> is now S7 to S9. At this point in time I don't have the room for a
>>>> K9AY setup. I can only "dream" of a beverage.
>>>>
>>>> I have a Timewave ANC-4 which works very well on 40 meters as I can
>>>> null out ALL the "noise".
>>>>
>>>> Not so on 80 meters as it only knocks it down 2 S Units.
>>>> At best I have an S-6 noise level.
>>>>
>>>> This leads me to believe that I need a separate sensing antenna for 80
>>>> meters. Anyone have any ideas for this problem? Is this thinking
>>>> correct?
>>>>
>>>> I have been looking at low noise receiving loops and other low noise
>>>> antennas. Wellbrook athttp://www.wellbrook.uk.com/seems to have some
>>>> interresting possibilities, but some of the reviews I have read have
>>>> made me hesistant to purchase any of their products.
>>>>
>>>> What I need is some serious input from anyone who has any experience
>>>> and knowledge in dealing with low band noise issues.
>>>> As I am now space limited due to all the new neighbors any solution
>>>> would need to take this into consideration.
>>>>
>>>> TIA
>>>
>>> Just out of curiosity, have you tried locating the noise source. I had
>>> the same experience you are having more or less.
>>> I had been away from ham radio for a couple of years and when I fired
>>> it all up again HF was really noisy so I ran the radio off of battery
>>> while I shut down power to my house. I found the source of the noise
>>> was the display on my microwave oven.
>>> Short term solution was keeping the microwave unplugged until needed.
>>> Long term solution was replacing the microwave. I did this when i

>>> found a better one at Goodwill for less than $20. Also check for RF on
>>> the coax during transmit. During rx this means the antenna is also
>>> picking up signals from the shield which may be in close proximity to
>>> noise generators.
>>>
>>>
>>> Jimmie
>>
>>
>>I did a good assessment of the noise being heard here.
>>I found an electric razor charger that was some of the problem and
>>a computer printer was another I found.
>>So my home is quite clean unless something else has popped up which I
>>don't know about and can't locate.
>>
>>I test with power on and power off. Right now theres very little
>>difference if any between the two.
>>
>>I would think its coming from someplace else, but until I can come up with
>>the exact location I need to decide on a solution thats effective.
> Understand your problem. In the Netherlands we live rather dense to
> each other. Consequently when you are a ham and try to receive
> something you are confronted with a blanket of man-made noise from
> various sources. Mainly they are coming from switched power supplies
> in some kind. It's almost impossible to adress all neighbours and
> de-noise the equipment. In NL the responsible salesman should remove
> these kind of QRM, you will imagine that it will cost a lot of effort
> convince him that his product is causing the problem. To get around,
> you can sample the noise, reverse it and add it to your antenna
> signal. The QRM is simply nulled out. The earlier mentioned ANC-4 is
> doing that, however I understood it's not capable to to do the job
> very well. Same goes for the MFJ-1025.
> Have a look at the page of pa0sim
> http://www.pa0sim.nl/Phaser%2080%20-%2010%20meters.htm
> Don't worry it's in English and it gives you some ideas how you can
> tackle the noise/qrm problem.
> If have your QRM sensor is correctly placed for picking up the "noise"
> and feedback it, it should do the trick. Alternatively, for those who
> have not the man made noise problem, you can null-out a short skip
> station in favour of that DX station you would like to work.
> Jan/pa3abk

thanks for the info, I will study it carefully.

2311. Re: Low Noise Receiving antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 06:18:33 UTC
From: Tony Giacometti <TonyGiacometti@gmail.com>
Message-ID: <N72dne69CrnCKYzanZ2dnUVZ_s_inZ2d@hawaiiantel.net>
Source record: 35493

Steve wrote:

> On Oct 13, 8:48 pm, "John, N9JG" <j...@Xremove.MeYgotwals.com> wrote:
>> If you don't mind spending the bucks, you might want to investigate
>> DXengineering's Noise Canceling Controller.
>>
Seehttp://www.dxengineering.com/Products.asp?ID={6F07CEB4-27D0-4664-A2AA-352A69ED88CD}&SecID=114&DeptID=12
>>
>>
>
>
> I'd love to hear from someone who's tried this phasing unit. If it's
> really light years ahead of the Timewave and MFJ units, I'd say it's
> worth the bucks.

its not that the Timewave doesn't work, on 40 meters its a killer.
But 75 is a whole other issue. I think I either need to rethink
this process, either by making a sense antenna for 75 meters only
or relocating the current one to a different position and some type of
orientation/configuration which favors both. I almost think it might be
better to do a separate 75 meter sense antenna.

2312. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 09:07:36 UTC
From: Derek <blueyhi5s@yahoo.com.au>
Message-ID: <1192352856.531780.196300@q5g2000prf.googlegroups.com>
Source record: 35494

On Oct 13, 9:28 pm, "Richard Fry" <r...@adams.net> wrote:

I must agree with Art, I think you have displayed a complete lack of
good manners, what is written in private should stay as such unless
agreed otherwise by both parties.

Derek

2313. You gooootta check out these awsome Porn Sites!!!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 09:36:48 UTC
From: jjoey66@yahoo.com
Message-ID: <1192354608.394770.93130@i13g2000prf.googlegroups.com>
Source record: 35495

This is my personal collection of the best porn sites on the net
right
now.I've seen em all and feel that the links below are pretty much
the
best of the best.

Reality Kings has so much free porn inside,it's crazy!!!
http://www.pure18.com/main.htm?id=starman

Pure 18 is loaded with some of the hottest teens in porn having
sex!!!
http://www.pure18.com/main.htm?id=starman

Sign up for FREE at Fling.com at meet a girl in your local area
within
the hour!
http://www.fling.com/enter.php?prg=2&t=best&id=starman

2314. Looking for "mobile.exe" by AA6GL

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 10:50:47 UTC
From: "Raphael.J" <pasdemail@free.fr>
Message-ID: <4711f485$0$27399$ba4acef3@news.orange.fr>
Source record: 35496

HI,

I'm looking for the software writed by Leon, AA6GL : Mobile.exe

I can't find it even with the help of Mr Google...

Thanks for info

raph

2315. Re: Looking for "mobile.exe" by AA6GL

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 12:52:14 UTC
From: Brian Howie <brian@nospam.demon.co.uk>
Message-ID: <VO7k8PB+DhEHFw1J@b-howie.demon.co.uk>
Source record: 35497

In message <4711f485$0$27399$ba4acef3@news.orange.fr>, Raphael.J
<pasdemail@free.fr> writes
>HI,
>
>I'm looking for the software writed by Leon, AA6GL : Mobile.exe
>
>I can't find it even with the help of Mr Google...
>
>Thanks for info
>
>raph

I've a copy here, if you want to send me your email address. You don't
have a valid return address.

73 Brian GM4DIJ
--
Brian Howie

2316. Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 14:35:11 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192372511.805367.192630@y27g2000pre.googlegroups.com>
Source record: 35498

Equi is for equal, libra is the sign of Zodiac which is a pair of
scales

It means that a repetitive action must come back to its source.
AC power has a cycle as in frequency, thus its circuit is one
wavelength.

A quad antenna represents a one wave circuit where total length is
proportionat
to time .ie a picture of events during one cycle.
Now place along side of the quad a radiator of your choice where
the length of the short radiator is superimposed upon the quad.
For ease in foillowing the electrical circuit make your shorty
antenna
equal to one side of the quad

So the race begins. Both travel up for a time at the SAME velocity.
At the corner of the quad power travels onward until it gets to its
originating point to complete a cycle
The short antenna appears to have nowhere to go so what does it do?
To duplicate the quad action it must have a circuit of some sort where
the power can still travel forward during the time the power in the
quad
is still travelling to the originating point.

Complete the circuit of the short antenna showing the series of events
that occur upto the point that the events on the quad come to its
point of beginning.

Note The impedance of space is 377 ohms, the impedance of ground can
be your choice.
Art

2317. Re: Looking for "mobile.exe" by AA6GL

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 14:54:05 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <47122d8c$0$25630$4c368faf@roadrunner.com>
Source record: 35499

"Brian Howie" <brian@nospam.demon.co.uk> wrote in message
news:VO7k8PB+DhEHFw1J@b-howie.demon.co.uk...
> In message <4711f485$0$27399$ba4acef3@news.orange.fr>, Raphael.J
> <pasdemail@free.fr> writes
>>HI,
>>
>>I'm looking for the software writed by Leon, AA6GL : Mobile.exe
>>
>>I can't find it even with the help of Mr Google...
>>
>>Thanks for info
>>
>>raph
>
> I've a copy here, if you want to send me your email address. You don't
> have a valid return address.
>
> 73 Brian GM4DIJ
> --
> Brian Howie

me too please

Jimmie

2318. Re: Help in choosing a beam

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 14:55:41 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <R5qdndSucJNFsI_anZ2dnUVZ_iydnZ2d@bright.net>
Source record: 35500

Dear WA3YMM:

Which Tennadyne is on your list? Hard to beat for efficiency,
simplicity and bandwidth. The longer models (such as T10) appear to have
gain that is at least as good as a trap-beam.

In my opinion, having 18 MHz and 24 MHz coverage is valuable.

25 feet of un-guyed Rohn 25 is limited in the amount of wind induced
load that it can survive. If you are in an urban setting, or have a number
of substantial trees in most directions, you have a reduced chance of wind
damage. Do re-visit Rohn's recommendations.

Enjoy whatever you buy and get on the air. 73, Mac N8TT
--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net
"jam" <wa3ymm_pa@verizon.net> wrote in message
news:uf91h3l2uq8pkgdjapqjio2o8vfjbimjgc@4ax.com...
> Hello All!
>
> I am planning to put up my first tower and beam, the tower 25g braced
> to the house at 20 feet 45 ft tall and a Yaesu 800ga rotator.
>
> The Problem!
>
> What Beam to put on top?
>
> I have done my home work and currently trying to decide.
>
> 3 element Stepper IR (Looks good but, pricy! On the negative, if a
> wire bus comes lose or breaks your SOL)
>
> Mosley ta-63 (all band but no f/b)
>
> Mosley classic cl 33 + warc (Looks sturdy but, traps, no gain on 17
> meters)
>
> Sommer (looks good but a bit of Rube Goldburg + Heavy)
>
> Force 12 (pop ribits and tuners ???????)
>
> Tennadyne (same gain as 2 element yagi big! Swr)
>
> I hope to here what the opinions are.

>
> Thanks All
>
> WA3YMM

2319. Re: Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 15:07:36 UTC
From: Dave <noone@nowhere.com>
Message-ID: <YgqQi.891$GM2.833@trndny02>
Source record: 35501

"art" <aunwin@insightbb.com> wrote in message
news:1192372511.805367.192630@y27g2000pre.googlegroups.com...
> Equi is for equal, libra is the sign of Zodiac which is a pair of
> scales
>
> It means that a repetitive action must come back to its source.
> AC power has a cycle as in frequency, thus its circuit is one
> wavelength.
>
> A quad antenna represents a one wave circuit where total length is
> proportionat
> to time .ie a picture of events during one cycle.
> Now place along side of the quad a radiator of your choice where
> the length of the short radiator is superimposed upon the quad.
> For ease in foillowing the electrical circuit make your shorty
> antenna
> equal to one side of the quad
>
> So the race begins. Both travel up for a time at the SAME velocity.
> At the corner of the quad power travels onward until it gets to its
> originating point to complete a cycle
> The short antenna appears to have nowhere to go so what does it do?
> To duplicate the quad action it must have a circuit of some sort where
> the power can still travel forward during the time the power in the
> quad
> is still travelling to the originating point.
>
> Complete the circuit of the short antenna showing the series of events
> that occur upto the point that the events on the quad come to its
> point of beginning.
>
> Note The impedance of space is 377 ohms, the impedance of ground can
> be your choice.
> Art
>

but a wave comes back to it starting point after 1/2 cycle then reverses.
so why does your original assertion of a 1/2 wave 'gaussian' antenna still
hold? now, for a 1/4 wave monopole, where does the other 3/4's of a wave
come from?? and what happens to the power that is radiated? how does that
ever return to it's source to be in equilibrium? would a circuit that was
in equilibrium not be capable of radiating since everything has to return to
the source??

2320. Re: Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 16:09:48 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <40f4h3h6ovpk9nmct63hqf18f38j2mdjm4@4ax.com>
Source record: 35502

On Sun, 14 Oct 2007 07:35:11 -0700, art <aunwin@insightbb.com> wrote:

> libra is the sign of Zodiac which is a pair of
>scales

Hi Arthur,

OK, so now we see your work is taken from astrology, a variant of faith based science (aka superstition), but at least one older than Gauss.

Leave analysis of English to those who know the language - not the natives. ;-)

>AC power has a cycle as in frequency, thus its circuit is one
>wavelength.

So, for my AC powered oven to work at 60Hz, it must be resonant, or be at the end of a 5 million meter long extension cord. No wonder the price of copper is where it is. Did Edison or Tesla ever study Gauss - do you think?

Leave analysis of Science to those who know math - unless, of course, you can show a proof of how a fluorescent tube demonstrates equal Librium at twice the AC power cycle frequency of 60Hz.

[A gaussian theory that fails anywhere, fails everywhere.]

73's
Richard Clark, KB7QHC

2321. Re: Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 16:14:23 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192378463.718551.272150@y27g2000pre.googlegroups.com>
Source record: 35503

On 14 Oct, 08:07, "Dave" <no...@nowhere.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1192372511.805367.192630@y27g2000pre.googlegroups.com...
>
>
>
>
>
> > Equi is for equal, libra is the sign of Zodiac which is a pair of
> > scales
>
> > It means that a repetitive action must come back to its source.
> > AC power has a cycle as in frequency, thus its circuit is one
> > wavelength.
>
> > A quad antenna represents a one wave circuit where total length is
> > proportionat
> > to time .ie a picture of events during one cycle.
> > Now place along side of the quad a radiator of your choice where
> > the length of the short radiator is superimposed upon the quad.
> > For ease in foillowing the electrical circuit make your shorty
> > antenna
> > equal to one side of the quad
>
> > So the race begins. Both travel up for a time at the SAME velocity.
> > At the corner of the quad power travels onward until it gets to its
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> > the power can still travel forward during the time the power in the
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> > is still travelling to the originating point.
>
> > Complete the circuit of the short antenna showing the series of events
> > that occur upto the point that the events on the quad come to its
> > point of beginning.
>
> > Note The impedance of space is 377 ohms, the impedance of ground can
> > be your choice.
> > Art
>
> but a wave comes back to it starting point after 1/2 cycle then reverses.
> so why does your original assertion of a 1/2 wave 'gaussian' antenna still

> hold? now, for a 1/4 wave monopole, where does the other 3/4's of a wave
> come from?? and what happens to the power that is radiated? how does that
> ever return to it's source to be in equilibrium? would a circuit that was
> in equilibrium not be capable of radiating since everything has to return to
> the source??- Hide quoted text -
>
> - Show quoted text -

Oh dear I forgot to mention, there is another path for current flow
and that is at the center of the radiator. The impedance of this path
is lower than the impedance to space so naturally that is the path the
power will take.
Now on this inner path there are no electrons to dislodge as the
outer
electrons have decayed before they reached the center path so the
current
during this time is just travelling without supplying radiation until
it reaches the bottom of the radiator.
But it's counter part the quad is radiating during this time
(How about that experts!) And by the way it was mentioned somewhere
that the ground resistance was 2 ohms so one should now be able to
determine the IMPEDANCE of ground at the antenna base point
Now you take it from there....experts!
Art KB9MZ...XG

2322. Re: Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 16:20:21 UTC
From: Dave <noone@nowhere.com>
Message-ID: <9lrQi.894$GM2.304@trndny02>
Source record: 35504

"art" <aunwin@insightbb.com> wrote in message
news:1192378463.718551.272150@y27g2000pre.googlegroups.com...
> On 14 Oct, 08:07, "Dave" <no...@nowhere.com> wrote:
>> "art" <aun...@insightbb.com> wrote in message
>>
>> news:1192372511.805367.192630@y27g2000pre.googlegroups.com...
>>
>>
>>
>>
>>
>> > Equi is for equal, libra is the sign of Zodiac which is a pair of
>> > scales
>>
>> > It means that a repetitive action must come back to its source.
>> > AC power has a cycle as in frequency, thus its circuit is one
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>> > A quad antenna represents a one wave circuit where total length is
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>> > the length of the short radiator is superimposed upon the quad.
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>> > antenna
>> > equal to one side of the quad
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>> > So the race begins. Both travel up for a time at the SAME velocity.
>> > At the corner of the quad power travels onward until it gets to its
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>> > To duplicate the quad action it must have a circuit of some sort where
>> > the power can still travel forward during the time the power in the
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>> > Complete the circuit of the short antenna showing the series of events
>> > that occur upto the point that the events on the quad come to its
>> > point of beginning.
>>
>> > Note The impedance of space is 377 ohms, the impedance of ground can
>> > be your choice.
>> > Art
>>

>> but a wave comes back to it starting point after 1/2 cycle then reverses.
>> so why does your original assertion of a 1/2 wave 'gaussian' antenna
>> still
>> hold? now, for a 1/4 wave monopole, where does the other 3/4's of a wave
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>> that
>> ever return to it's source to be in equilibrium? would a circuit that
>> was
>> in equilibrium not be capable of radiating since everything has to return
>> to
>> the source??- Hide quoted text -
>>
>> - Show quoted text -
>
> Oh dear I forgot to mention, there is another path for current flow
> and that is at the center of the radiator. The impedance of this path
> is lower than the impedance to space so naturally that is the path the
> power will take.
> Now on this inner path there are no electrons to dislodge as the
> outer
> electrons have decayed before they reached the center path so the
> current
> during this time is just travelling without supplying radiation until
> it reaches the bottom of the radiator.
> But it's counter part the quad is radiating during this time
> (How about that experts!) And by the way it was mentioned somewhere
> that the ground resistance was 2 ohms so one should now be able to
> determine the IMPEDANCE of ground at the antenna base point
> Now you take it from there....experts!
> Art KB9MZ...XG
>

ah, the no electron anti-skin effect return path up the middle of the element. what about my elements that are hollow? where does the current flow then? or where does it flow in wire cage elements?? what about coiled elements like that 'new' short monopole, does it flow around and around inside the wire, or take a shortcut through something else? How does this fit into current wave reflection theory that easily explains the currents on elements complete with easily measured and well predicted values that don't require a return current up the middle?? too many questions left hanging art, you gotta work on that theory a bit more to fill in all the holes. oh, maybe thats it, try incorperating holes into your next version, maybe thats how the current flows back along the inside, it is the holes left over when the electrons 'decay'!

2323. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 16:27:18 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13h4gr6edb2cr50@corp.supernews.com>
Source record: 35505

On Thu, 11 Oct 2007 06:23:44 -0700, Roy Lewallen <w7el@eznec.com> wrote:
> Frnak McKenney wrote:
>> . . .
>> Okay... ARRL Antennas, Chapter 8: Multielement Arrays. We've got
>> an (approximately, given skip) vertically-polarized 10MHz signal, so
>> the E-field is moving up and down and the wavefront is a circular
>> ripple (nearly a straight line by the time it gets to Richmond)
>> travelling roughly west-to-east, that is, it's hitting my house
>> end-on.
>> . . .
--snip--
> While you're looking at the ARRL Antenna Book, look over the chapter on
> propagation. You'll find that when receiving a signal by ionospheric
> skip (as you are), the polarization will be randomly oriented. So
> there's no point in choosing your antenna orientation on the basis of
> some supposed wave polarization. Its orientation will, however, have a
> striking impact on its pattern, so you should choose the orientation to
> get the most favorable pattern.

Ah. So even if it starts out in vertically polarized in Fort
Collins 'way out thataway (he says, gesturing faintly west-ish)
WWV's signal might be polarized north-north-west by the time it gets
ro Richmond.

> The fading in and out of the WWV signal you described in an earlier
> posting is very likely due largely or at least partially to polarization
> shift -- the signal fades when the polarization rotates to be crosswise
> to your antenna, and gets loud when the polarization lines up with your
> antenna's. I've seen tens of dB difference switching between a
> vertically and horizontally polarized antenna, with the change going the
> other way after a minute or so when the polarization rotates. If your
> receiver needs a constantly strong signal, you're going to have a hard
> time getting it what it needs.

Hm. Wonder if anyone has built an antenna whose polarization shifts
to "best match" the incoming signal? (No, not _this_ weekend!
<grin>!)

> I haven't followed the thread closely, so please pardon me if I've
> missed something. Your initial description of the problem sounded like
> receiver overload. A sharp preselector would help a lot, although it
> sounded like you were using a tuned loop which, if carefully balanced,
> should provide that function.

A minor update: It seems that I was _mis_tuning my antenna,
adjusting it for the strongest signal (highest stack of LEDs lit).

Over the past two days either I've finally tuned it _correctly_ or I've done that _and_ the signal has improved. Whatever the cause(s), I can now -- at times, in fact for an hour at a time -- hear the tocks fairly clearly and even understand the voice. (Who knew the announcer's phrase for UTC "Coordinated Universal Time"?).

How good? Well, I've unplugged the clock to reset it and it has then received an "acceptable" WWV signal (it started showing digits) eight times in the past two days. It might have been more times, but I don't watch it constantly, and I've noticed that twiddling the tuning knob tends to make sync-ing a little harder. ("Ack! It's fading! See if I can tune the antenna _just_ a little better!" <grin!>)

I _do_ know that the point of best reception is much narrower that I thought it when I was tuning in that "other" signal. Turning the tuning capacitor's knob a "minor wiggle" either way can decrease the signal strength by an LED or 2, and I need to compensate for the effect of moving my hand near the antenna to tune it. <grin!>.

Oh, and the MAC-II seems to be a lot pickier about what it will and will not accept than my ears are. The microprocessor is driven by a 9.216MHz crystal and it's an 87C52 (an 8051-alike) which (as I recall) means it only gets around 0.768 MIPS (clk/12) to do all its work, so I doubt it's doing much "DSP" itself; its interrupt lines are tied to a 567 tone decoder IC for WWV's "start of minute" and BCD data subcarrier tones (1000Hz and 100Hz).

The MAC-II seems to be very "picky". Part -- but not all -- of its requirement for starting the clock digits running is that it receive a recognizable 100Hz signal for a full minute, that is, between one 1000Hz tone and the next. In other words, if WWV's signal is fading on a 5- or 30-second cycle, odds are good that at one point the signal will be come "bad". I've seen it recognize the start of a "frame" by lighting its CAPTURE LED, but then turn it out ten or forty seconds later when part of the frame has faded a bit; my ears can still recognize the tones, but the're better designed and have a better processor than the MAC-II<grin!>. This pickiness I suspect is part of the reason it takes to long for the clock to start running.

> ... If a preselector isn't enough, the next
> step is to add an attenuator -- I have to use one between my TV and its
> antenna, in fact. You should consider the possibility that the 10 MHz
> WWV signal itself is overloading the receiver, in which case an
> attenuator is necessary, and the last thing you'd want to do is use a
> better antenna. A directional antenna can be used to reduce the strength
> of interfering signals if they're coming from directions different than
> WWV. But making an antenna which has good rejection in the right
> directions can be something of a project.

I do a lot of reading in comp.dsp (sometimes it's fun just watching the phrases fly back and forth <grin!>), and one common topic there is the difference between "noise" and "signal". For me, "signal" is "what I want", "noise" is "everything else", and the fun(?) part is figuring out how to get as much of the former as I can while downplaying or being able to ignore the effects of the latter. My next step is to add a "line out" jack to the MAC-II so I can capture long stretches of the signal to disk; when reception goes bad again I'll be able to use Scilab or Matlab or something to play "Beat the Heathkit!" with my own algorithms.

And if I get tired of that, I can unsolder the 87C52 and wire in one of Atmel's $20 Butterfly boards in its place, adding an LCD and my own algorithms. And _then_ I can... and _then_ I can... <grin!>

Anyway, "It's feeling _much_ better now." <grin!>

Frank
--
The first Zen master in Japan to write extensively on good and evil was Dogen Zenji... Dogen was one of the most adamant of those who rejected the widespread use of Buddhism for social, political, and material power; and he was driven out of the capital area for his trouble.
-- Thomas Cleary / The Japanese Art of War
--
Frank McKenney, McKenney Associates
Richmond, Virginia / (804) 320-4887
Munged E-mail: frank uscore mckenney ayut minds pring dawt cahm (y'all)

2324. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 16:28:33 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13h4gthhbiqkq70@corp.supernews.com>
Source record: 35506

On Thu, 11 Oct 2007 07:51:55 -0700, Richard Clark <kb7qhc@comcast.net> wrote:
> On Thu, 11 Oct 2007 12:12:14 -0000, Frnak McKenney
><frnak@far.from.the.madding.crowd.com> wrote:
>> _ _
>> _ _ /_ /_ /_ /_
>> / / /_/ /_ _/ /_ /_
>>
>>and it stays that way for weeks. Or months.
>
> A whip antenna should be able to sort out WWV for at least one of 1400
> synchronizing events in a day. This may be a problem of too much
> antenna at one time - and a nearby lightning event at that same time.
> Your front end got fried out.

If you're reading these posts in the same order I'm posting, you'll
have already read my good news:

It's Working!

(Oh. That's right -- this is Usenet. Y'all can't here the
"doooonb"-ing from down the hall. Well, take my word for it -- or
even the MAC-II's display! <grin>)

This doesn't prove that the MAC-II's J-FET RF amplifier hasn't been
degraded through an... er, "very wideband RF overload" <grin!>, but
I think it does say that "completely fried" is unlikely (which
pleases me greatly! <grin>).

My earlier MAC-I had a nice whip built in, and could select the
strongest signal among (IIRC) 5, 10, and 15MHz, but it had the same
problems getting an "acceptable" WWV signal most of the time.

Frank
--
"Whatever you can do, or dream you can, begin it.
Boldness has genius, power and magic in it" -- Goethe
--
Frank McKenney, McKenney Associates
Richmond, Virginia / (804) 320-4887
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2325. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 16:30:50 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13h4h1q82o3fgb6@corp.supernews.com>
Source record: 35507

On Thu, 11 Oct 2007 09:52:53 -0700, Jim Lux <james.p.lux@jpl.nasa.gov> wrote:
> Frnak McKenney wrote:
--snip--
>> As for testing the clock's accuracy, you're right about needing a
>> second source ("Qui custodiet ipsos custodes?" or something like
>> that? <grin>). On the other hand, as long as the digits are
>> flashing by, I'm happy to "just trust them".
>
> One needs three clocks.. if you have only two, you only know that they
> differ. If you have three, you can detect the failed clock, because the
> other two read the same time.

Well, you have a reasonable _presumption_, anyway. <grin>

In _theory_, one could have two clocks in error and one on time. Or
even all three out of step with (say) the NIST's clock. But
two-out-of-three would be the place to put your money. <grin>

> Of course, if the different clocks have different accuracies or
> reliabilities, that's another story.
>
> For a more detailed treatment of such things, you might want to check
> out the "Byzantine General" problem.

Faint recollections... "unreliable communication on the
battlefield" category?

>> Based on the feedback from other posters, it's likely a consequence
>> of 10MHz propagation. A VLF RF signal like 60KHz reportedly does a
>> much better job of getting a readable signal to a wide area.
>
> Although in my house (southern California), the 60 kHz signal seems to
> fade in and out on a daily basis.

I can believe it. I've seen those LCD "clock and weather" stations
take days to synchronize the time (I assume they're using WWVB).
OTOH, I'm hardly one to talk, since I've let the MAC-II sit
liostening for months at a time without successfully locking-in on
WWV.

Frank
--
Hanlon's Razor: ï¿½Never attribute to malice that which can
be adequately explained by stupidity.ï¿½
--
Frank McKenney, McKenney Associates

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Munged E-mail: frank uscore mckenney ayut minds pring dawt cahm (y'all)

2326. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 16:32:26 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13h4h4qnr27ibe2@corp.supernews.com>
Source record: 35508

On Thu, 11 Oct 2007 11:21:29 -0700, Robert Smts <bob@rsmits.ca> wrote:
> Frnak McKenney wrote:
--snip--
>> On Tue, 09 Oct 2007 22:35:29 -0700, Robert Smts <bob@rsmits.ca> wrote:
>>>Frnak McKenney wrote:
>>>> I'm in Richmond, Virginia and I'm trying to noticeably improve my
>>>> reception of WWV's 10MHz signal from Fort Collins, Colorado.
--snip--
>>
>>>Frank, can't you erect anything outside at all? A 10 metre dipole,
>>>is after all, only about 5 metres long. And if you can't do that,
>>>what kind of attic do you have? If your house is oriented
>>>correctly, you could even build a three element wire yagi pointed
>>>west inside the attic.
--snip--
>> I definitely think I'm missing something, but then, I haven't really
>> made it that far into the Antenna Handbook.
>>
>> Anyway, thanks for the suggestion.
>
> You're welcome. Your characterisation of the antenna as above is correct,
> and hopefully your attic is correctly oriented. Of course if you can put it
> outside, fixed wire beams are often very useful.

If I'm following the ARRL handbook correctly, I want the elements
laid out _across_ the incoming wavefront. For Fort Collins to
Richmond, that is, going west to east, that would mean I'd want to
string the wires/elements north-south. Naturally (per Murphy, the
patron saint of Data Processing) my house is oriented E-W. Which
does still, as you point out, leave the possibility of building
something outdoors.

Still, my current indoor loop seems to be picking up a nice strong
signal. It was upright when I first started testing, but it wound up
being laid flat at some point in the past few days -- about the time
I discovered that I had been mis-tuining it. Wonder which had more
effect: my changes, or atmospherics? <grin!>

Anyway, thank you for your time and suggestions. I did some looking
around on the 'web for introductory material to help me understand
the ARRL Antenna Handbook and stumbled onto these:

Antenna Newcomers and the Language of Antennas
http://www.cebik.com/tales/nc.html

Antennas from the Ground Up
http://www.cebik.com/gup/groundup.html

Some really nice propagation plots. Now, if there were just some
simple way of figuring out which way the antenna is oriented
relative to the plots... "It's an imperfect universe" <grin!>

Frank
--
Anyone who is not genuinely addicted to the search for knowledge
is unlikely to have the psychological energy to be a true scholar
in any field. But in history this work clearly resembles more
that of a detective than that of a scientist -- a search for and
judgment of particular evidence rather than a repeatable
experiment. The detective side of historical research needs
skill, background, and intuition.
-- Robert Conquest, "The Dragons of Expectation"
--
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2327. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 16:34:50 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13h4h9ariucr551@corp.supernews.com>
Source record: 35509

Tim,

Thanks for joining in.

On Sat, 13 Oct 2007 17:27:01 -0700, Tim Shoppa <shoppa@trailing-edge.com> wrote:
> Frnak McKenney wrote:
>> I'm in Richmond, Virginia and I'm trying to noticeably improve my
>> reception of WWV's 10MHz signal from Fort Collins, Colorado. It all
>> seemed so simple, two weeks ago: wind some wire, solder a
>> connector, and Hey...presto! a clean WWV signal. <grin!>
--snip--
>
> Frank -
> I am up in Maryland, not too far from you.
>
> WWV on 10MHz is only usable for about a third or less of the day for
> locking an electronic clock. Generally the late afternoons and
> evenings are great, early afternoons and mornings are a little more
> variable.
>
> Overnight 5MHz works best. During the mid-day 15MHz or when
> propogation permits 20MHz rules for WWV. I don't think your Heath has
> any frequency diversity capability, right? Well, 10MHz is a pretty
> good choice if you only have a choice of one, it is usually coming in
> strong in the evenings there. Over wintertime 5MHz gets pretty good at
> night.

My current box, the MAC-II, only monitors 10MHz; its predecessor,
the GC-1000 MAC, monitored (IIRC) 5/10/15MHz and chose the
strongest.

> You will, especially in the early morning, occasionally hear WWVH on
> 10MHz or 5MHz or 15MHz. Sometimes I hear both WWV and WWVH at the same
> time. You can recognize WWVH by the woman's voice reading the time.
>
> My best antenna for 10MHz WWV is my 40-meter dipole strung between
> two trees. Mine mostly points broadside to the NE/SW but if you could
> arrange it, it would be slightly preferable to have it broadside to be
> sensitive to the W.
>
> A dipole optimized for 10MHz would be even shorter - the formulas
> put a half wave dipole at 47 feet long.

Thanks for your signal report and the antenna suggestion. I'll keep
it in mind.

On the other hand, my tuned (and currently horizontal) loop is
suddenly picking up WWV/10MHz remarkably reliably, and I didn't even
have to "sacrifice a goat at midnight"! <grin>

Has your reception improved lately as well (last few days)?

Frank
--
Writers listen for harmonies; civilians listen for melody alone.
For them the facades of ordinary situations are opaque, and they
see what is there to be seen. Writers are attracted to translucence.
We start with nothing but an idea, an agitation, a compulsion, an
irritation. That, plus a bumblebee's faith that it can fly.
-- Hal Ackerman / Write Screenplays That Sell
--
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2328. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 16:36:07 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13h4hbnb0bejr8d@corp.supernews.com>
Source record: 35510

On Thu, 11 Oct 2007 11:26:03 -0700, K7ITM <k7itm@msn.com> wrote:
> On Oct 11, 5:12 am, Frnak McKenney
><fr...@far.from.the.madding.crowd.com> wrote:
>> On Wed, 10 Oct 2007 10:19:49 -0700, Richard Clark <kb7...@comcast.net> wrote:
>> > On Tue, 09 Oct 2007 02:16:37 -0000, Frnak McKenney
>> ><fr...@far.from.the.madding.crowd.com> wrote:
>>
>> >>Am I asking too much?
>>
>> >Hi Frnak,
>>
>> >Judging by the questions and responses, I would have to say "Yes."
--snip--

> Gee, all this trouble you're having getting a good signal from WWV on
> 10MHz makes me wonder, "why??" I mean, why bother? It must be the
> challenge! I'm a bit closer to Ft. Collins, but I wouldn't expect
> things to be all that much different, and in any event, the same
> antenna I've used for them has worked fine for signals from W1AW, for
> frequency measuring tests. That antenna is just a short piece of
> wire, maybe five feet long, connected to a signal analyzer's input
> port. The signal analyzer's input doesn't even have a particularly
> good noise figure. But with it, I get a good enough signal from WWV
> to easily track the nocturnal/diurnal frequency shifts that happen as
> the path length changes. (The analyzer may not have a great RF front
> end, but it has a very stable frequency reference...) Similarly, I
> have a portable short wave radio that has an awful front end, and with
> just a 3 foot whip antenna, it gets WWV 10MHz fine most of the time.
> Obviously, there are times of the day when propagation just doesn't do
> it, but over the period of one day, and not during a geomagnetic
> storm, the signal is usually available.

Hm. Sounds great.

> All this makes me wonder if the receiver in your clock is OK. I'd
> start by looking at that; or at very least, see if a known-working
> radio receiver has as much trouble with the signal as the clock seems
> to. Given that the clock has a single frequency receiver, even a
> pretty simple receiver design should give decent performance.

The RF section is a one-transistor (J-FET) amplifier followed by a
TDA1072A "Integrated AM receiver" chip. I'm not sure how to go
about comparing that to your equipment.

> It's also possible that you have some signal source on nominally 10MHz
> nearby, and you hear than instead of WWV. There are soooo many

> microprocessors around the average home these days that it's entirely
> possible that the source of the trouble is very nearby--but could also
> be in a neighbor's house (or car -- or garage -- or ??).

Highly possible, but the noise level "at the speaker" seems to have
fallen off appreciably in the past few days. Also, I think I'm
doing a better job of tuning the antenna; adjusting with no clearly
defined signal is a chicken-and-egg problem, but two days ago I
started hearing a deafening cackle. <grin!>

> If you want an accurate clock and get tired of fooling with WWV-10MHz,
> and don't want to use WWVB-60kHz, you might consider using a GPS. As
> long as you can manage an antenna with a reasonably clear view of the
> sky, you should be able to have a clock reliably set to within less
> than a second accuracy practically all the time. Or, if you'd like to
> be independent of external references, modify your MAC with an oven
> oscillator. Oven stabilized crystal oscillators left on for a long
> time will almost always settle out to very low drift rates---one part
> in 10^8 over a year shouldn't be difficult, in my experience, and GPS
> signals can be used to calibrate it occasionally. One part in 10^8 is
> about 1/3 of a second per year.

Yup. GPS would eb the way to go for accuracy... or -- for the
billion-dollar-budget people -- your very own Cesium Clock. <grin!>

Frank
--
To learn is to change. Learning allows an animal child to
finish the long, slow process of evolution by changing in its
own lifetime. Tiger cubs, eaglets, or babies, nature brings
us all into existence with the ability to learn, and the rest
is up to us. -- Susan McCarthy / Becoming a Tiger
--
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2329. Re: Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 16:53:14 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <j0g4h3djt07v41c4t3ehdogtrd10aabrmn@4ax.com>
Source record: 35511

>On Sun, 14 Oct 2007 07:35:11 -0700, art <aunwin@insightbb.com> wrote:
>
>> libra is the sign of Zodiac which is a pair of
>>scales

>Leave analysis of English to those who know the language - not the
>natives. ;-)

Let's now proceed with that analysis...

Libra (actually the postfix of equilibrium is Librium, a drug used in the treatment of anxiety disorders), when we divorce it of the nonsense science of astrology (there is lot of nonsense going around this topic), Libra is a fairly common root word found throughout Europe having emerged from the Roman empire. Nearly every context of Libra is with weight, and means "pound." Any Englishman would know this, of course, given the obvious correlation to ï¿½. Odd thing is that the Roman pound (a libra) is closer in weight to a Kilogram than it is an English pound (in weight, not cost).

However, I was brash to dismiss the faith based science of astrology, and in an effort to be equilhanded, we should proceed to the meaning of Libra in that context:
"Social consciousness. Affableness. Love of Beauty.
The longing for comradeship. Sympathy. Justice.
Spiritual devotion."

Historically, astrology has been used to justify selling missiles to Iran to obtain funds to support the failed "patriots" of Nicaragua - so it comes as no surprise that it should pollute the idiom of RF.

Thank you Arthur for giving me the opportunity to set the vocabulary straight,

[In a grand jesture of Librality, no emails were harmed through inaffable violations of private spiritual devotions being disclosed within this analysis.]

73's
Richard Clark, KB7QHC

2330. Re: Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 17:06:18 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <9hi4h3l3rooc0b0g6ph543rd42j213s5r6@4ax.com>
Source record: 35512

On Sun, 14 Oct 2007 16:20:21 GMT, "Dave" <noone@nowhere.com> wrote:

>what about coiled
>elements like that 'new' short monopole, does it flow around and around
>inside the wire

Dave,

With your accurate shorthand of validation, you are treading very
close to Arthur's loose Gaussian shoelaces and may soon find yourself
elevated by him to his Academy of Supporters of Seance when he trips.

Won't you be embarrassed when he sites you as his authority for your
cogent analaysis!

73's
Richard Clark, KB7QHC

2331. Re: Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 17:32:53 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192383173.166048.138730@v23g2000prn.googlegroups.com>
Source record: 35513

On 14 Oct, 09:20, "Dave" <no...@nowhere.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1192378463.718551.272150@y27g2000pre.googlegroups.com...
>
>
>
>
>
> > On 14 Oct, 08:07, "Dave" <no...@nowhere.com> wrote:
> >> "art" <aun...@insightbb.com> wrote in message
>
> >>news:1192372511.805367.192630@y27g2000pre.googlegroups.com...
>
> >> > Equi is for equal, libra is the sign of Zodiac which is a pair of
> >> > scales
>
> >> > It means that a repetitive action must come back to its source.
> >> > AC power has a cycle as in frequency, thus its circuit is one
> >> > wavelength.
>
> >> > A quad antenna represents a one wave circuit where total length is
> >> > proportionat
> >> > to time .ie a picture of events during one cycle.
> >> > Now place along side of the quad a radiator of your choice where
> >> > the length of the short radiator is superimposed upon the quad.
> >> > For ease in foillowing the electrical circuit make your shorty
> >> > antenna
> >> > equal to one side of the quad
>
> >> > So the race begins. Both travel up for a time at the SAME velocity.
> >> > At the corner of the quad power travels onward until it gets to its
> >> > originating point to complete a cycle
> >> > The short antenna appears to have nowhere to go so what does it do?
> >> > To duplicate the quad action it must have a circuit of some sort where
> >> > the power can still travel forward during the time the power in the
> >> > quad
> >> > is still travelling to the originating point.
>
> >> > Complete the circuit of the short antenna showing the series of events
> >> > that occur upto the point that the events on the quad come to its
> >> > point of beginning.
>
> >> > Note The impedance of space is 377 ohms, the impedance of ground can

> >> > be your choice.
> >> > Art
>
> >> but a wave comes back to it starting point after 1/2 cycle then reverses.
> >> so why does your original assertion of a 1/2 wave 'gaussian' antenna
> >> still
> >> hold? now, for a 1/4 wave monopole, where does the other 3/4's of a wave
> >> come from?? and what happens to the power that is radiated? how does
> >> that
> >> ever return to it's source to be in equilibrium? would a circuit that
> >> was
> >> in equilibrium not be capable of radiating since everything has to return
> >> to
> >> the source??- Hide quoted text -
>
> >> - Show quoted text -
>
> > Oh dear I forgot to mention, there is another path for current flow
> > and that is at the center of the radiator. The impedance of this path
> > is lower than the impedance to space so naturally that is the path the
> > power will take.
> > Now on this inner path there are no electrons to dislodge as the
> > outer
> > electrons have decayed before they reached the center path so the
> > current
> > during this time is just travelling without supplying radiation until
> > it reaches the bottom of the radiator.
> > But it's counter part the quad is radiating during this time
> > (How about that experts!) And by the way it was mentioned somewhere
> > that the ground resistance was 2 ohms so one should now be able to
> > determine the IMPEDANCE of ground at the antenna base point
> > Now you take it from there....experts!
> > Art KB9MZ...XG
>
> ah, the no electron anti-skin effect return path up the middle of the
> element. what about my elements that are hollow? where does the current
> flow then? or where does it flow in wire cage elements?? what about coiled
> elements like that 'new' short monopole, does it flow around and around
> inside the wire, or take a shortcut through something else? How does this
> fit into current wave reflection theory that easily explains the currents on
> elements complete with easily measured and well predicted values that don't
> require a return current up the middle?? too many questions left hanging
> art, you gotta work on that theory a bit more to fill in all the holes. oh,
> maybe thats it, try incorperating holes into your next version, maybe thats
> how the current flows back along the inside, it is the holes left over when
> the electrons 'decay'!- Hide quoted text -
>
> - Show quoted text -

Well now David thge charge has arrived at the bottom of the radiator.
It is now in a quandry
it looks over at the quaud and ssees that the charge over there is
half way around!
So the charge on the small radiator finds that it can only go up
aqgain forming a loop of current.
Fortunately it is now back on track radiating just like the quad.
Ofcourse when he gets to the top
it again has only one place to go and that is down the center again
where it can't radiatiate
like the quad is doing.When the charge gets to the bottom it wsees a
path of 2 0hms (the resistor)
so it passes thru the resistor where the charge finally gets back to
the starting point at exactly the same time that the charge of the
quad got back home.
So the sequence of events is that the short antenna only radiated half
of the time neglecting the travel thru the resister of course. So the
quad radiated twice the time of the smaller radiator which amounts to
a 3 db gain.
Well some might say we knew that a quad radiated more because it is
the same as two dipoles(half wave) on top of
each other so yes for the same power expended in the same amount of
time a full wave radiator radiates twice the power that a quarter wave
does.
Art you are a genius put QED at the end of this post and also get hold
of Yuru so that he now can get to sleep at night.
Art Unwin KB9MZ.......XG (uk)

2332. Re: Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 17:54:23 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192384463.014265.126310@e34g2000pro.googlegroups.com>
Source record: 35514

On 14 Oct, 08:07, "Dave" <no...@nowhere.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1192372511.805367.192630@y27g2000pre.googlegroups.com...
>
>
>
>
>
> > Equi is for equal, libra is the sign of Zodiac which is a pair of
> > scales
>
> > It means that a repetitive action must come back to its source.
> > AC power has a cycle as in frequency, thus its circuit is one
> > wavelength.
>
> > A quad antenna represents a one wave circuit where total length is
> > proportionat
> > to time .ie a picture of events during one cycle.
> > Now place along side of the quad a radiator of your choice where
> > the length of the short radiator is superimposed upon the quad.
> > For ease in foillowing the electrical circuit make your shorty
> > antenna
> > equal to one side of the quad
>
> > So the race begins. Both travel up for a time at the SAME velocity.
> > At the corner of the quad power travels onward until it gets to its
> > originating point to complete a cycle
> > The short antenna appears to have nowhere to go so what does it do?
> > To duplicate the quad action it must have a circuit of some sort where
> > the power can still travel forward during the time the power in the
> > quad
> > is still travelling to the originating point.
>
> > Complete the circuit of the short antenna showing the series of events
> > that occur upto the point that the events on the quad come to its
> > point of beginning.
>
> > Note The impedance of space is 377 ohms, the impedance of ground can
> > be your choice.
> > Art
>
> but a wave comes back to it starting point after 1/2 cycle then reverses.
> so why does your original assertion of a 1/2 wave 'gaussian' antenna still

> hold? now, for a 1/4 wave monopole, where does the other 3/4's of a wave
> come from?? and what happens to the power that is radiated? how does that
> ever return to it's source to be in equilibrium? would a circuit that was
> in equilibrium not be capable of radiating response

David
you have a broken brain, you have to
consult all parts of your brain as with
a committee. Thus your questions
are those that come from a committee
which never solves anything
By the way the radiator is just a small part of our solar system.
The radiation particles can only come to rest on a diamagnet material
so accuse your listener of stealing your radiation energy at least
those particles that do arrive while others decay
Art

2333. Re: Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 18:17:11 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <qdl4h3dp1ral4cn4u77319qhobros28123@4ax.com>
Source record: 35515

On Sun, 14 Oct 2007 10:32:53 -0700, art <aunwin@insightbb.com> wrote:

>So the
>quad radiated twice the time of the smaller radiator which amounts to
>a 3 db gain.

Hmmm, this puts Robert Vincent's antenna into a cocked hat through a chain of your denials. Well, society needs Libras who can believe six impossible things before breakfast. Imagine, we get to see them posted here before brunch too!

2334. Re: Looking for "mobile.exe" by AA6GL

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 18:28:57 UTC
From: "Raphael.J" <pasdemail@free.fr>
Message-ID: <47125fe7$0$27410$ba4acef3@news.orange.fr>
Source record: 35516

> I've a copy here, if you want to send me your email address. You don't
> have a valid return address.

Hello Brian,

I made a special address for your sending : "d.alien AT free.fr"

Thanks a lot for your help.

73

2335. Re: Looking for "mobile.exe" by AA6GL

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 19:22:15 UTC
From: Brian Howie <brian@nospam.demon.co.uk>
Message-ID: <nZdYZOBnxmEHFwDk@b-howie.demon.co.uk>
Source record: 35517

In message <47125fe7$0$27410$ba4acef3@news.orange.fr>, Raphael.J
<pasdemail@free.fr> writes
>> I've a copy here, if you want to send me your email address. You don't
>> have a valid return address.
>
>Hello Brian,
>
>I made a special address for your sending : "d.alien AT free.fr"
>
>Thanks a lot for your help.

Ok I've sent it. Rename the .oxo file to .exe . Your firewall might have
rejected the .exe . Let me know if you get it ok.

73 Brian

--
Brian Howie

2336. Re: Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 20:01:30 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192392090.983593.256900@k35g2000prh.googlegroups.com>
Source record: 35518

On 14 Oct, 10:54, art <aun...@insightbb.com> wrote:
> On 14 Oct, 08:07, "Dave" <no...@nowhere.com> wrote:
>
>
>
>
>
> > "art" <aun...@insightbb.com> wrote in message
>
> >news:1192372511.805367.192630@y27g2000pre.googlegroups.com...
>
> > > Equi is for equal, libra is the sign of Zodiac which is a pair of
> > > scales
>
> > > It means that a repetitive action must come back to its source.
> > > AC power has a cycle as in frequency, thus its circuit is one
> > > wavelength.
>
> > > A quad antenna represents a one wave circuit where total length is
> > > proportionat
> > > to time .ie a picture of events during one cycle.
> > > Now place along side of the quad a radiator of your choice where
> > > the length of the short radiator is superimposed upon the quad.
> > > For ease in foillowing the electrical circuit make your shorty
> > > antenna
> > > equal to one side of the quad
>
> > > So the race begins. Both travel up for a time at the SAME velocity.
> > > At the corner of the quad power travels onward until it gets to its
> > > originating point to complete a cycle
> > > The short antenna appears to have nowhere to go so what does it do?
> > > To duplicate the quad action it must have a circuit of some sort where
> > > the power can still travel forward during the time the power in the
> > > quad
> > > is still travelling to the originating point.
>
> > > Complete the circuit of the short antenna showing the series of events
> > > that occur upto the point that the events on the quad come to its
> > > point of beginning.
>
> > > Note The impedance of space is 377 ohms, the impedance of ground can
> > > be your choice.
> > > Art
>

> > but a wave comes back to it starting point after 1/2 cycle then reverses.
> > so why does your original assertion of a 1/2 wave 'gaussian' antenna still
> > hold? now, for a 1/4 wave monopole, where does the other 3/4's of a wave
> > come from?? and what happens to the power that is radiated? how does that
> > ever return to it's source to be in equilibrium? would a circuit that was
> > in equilibrium not be capable of radiating response
>
> David
> you have a broken brain, you have to
> consult all parts of your brain as with
> a committee. Thus your questions
> are those that come from a committee
> which never solves anything
> By the way the radiator is just a small part of our solar system.
> The radiation particles can only come to rest on a diamagnet material
> so accuse your listener of stealing your radiation energy at least
> those particles that do arrive while others decay
> Art- Hide quoted text -
>
> - Show quoted text -

Now with respect to the current loop formed on the short antenna.
This loop defies the existing conception that a short radiator
is a series circuit but instead it is a parallel circuit ala tank
circuit mode
Where the energy sinks explode such that they put electrons in a orbit
mode as they travel because of their tenacity with respect to their
initial
resistance to motion(inertia)as they lay dormant on the outside of a
diagmatic material.
Diagmatic material is a material that will allow an electron to rest
on it's surface
without being combined into the basic material that consists of an
atom and a lot
of other stuff that is in orbit and in equilibrium of itself.
Note that the electron that is now in orbit and is not polar, thus it
is not
affected by gravity on its travels on it's way to find a suitable
resting spot
(diagmatic surface)which can also be outside the earths sphere of
presence and
come to rest on another planets surface in the same way that moon
dust occurs.
NASA has had some success of blowing the moon dust off of material by
mimicing
a tank circuit using just one energy sink release where they were
able to remove
half of the moon dust or overcome it's inertia. Apparently they do
not want
this dust transported to the space vehicle. Note that while in

rotation the electron
posseses both weight and energy where the latter does decay over time
though its
weight stays dormant.Note that a diagmatic material has lots of
"spare" electrons
that imediately take the place of removed electrons and where it
prevents the
resetlement of electrons that do not escape the arbitary field around
the host
material forcing the returning electrons to reside under existing
surface
electrons to form a "skin depth" where they eventually decay.
Enuff said.
Gauss was on the right track when he decided to work at the
observatory.
Pity he didn't delay things and apply a time varying field to
accompany
his law on statics. But no worries a hundred years later along came
Art.
Art Unwin KB9MZ....XG (uk)

2337. Re: Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 20:16:18 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fettem$j7g$1@aioe.org>
Source record: 35519

Art wrote:
>....for the same power expended in the same amount of
> time a full wave radiator radiates twice the power that a
> quarter wave does.

So then where does the missing power applied to the 1/4-wave radiator go, if only half of its input power is converted to EM radiation?

RF

2338. wanted Comet CX-805

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 20:49:44 UTC
From: Osinnov <osinnov@nospam.be>
Message-ID: <IhvQi.156176$i87.8677399@phobos.telenet-ops.be>
Source record: 35520

Wanted for replace my broken mobile antenna
Comet CX-805
litle (2/70 dualband mobile whip PL connector)
nova at netbel dot be
tnx

2339. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 21:33:06 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192397586.026472.148310@y27g2000pre.googlegroups.com>
Source record: 35521

On 14 Oct, 02:07, Derek <blueyh...@yahoo.com.au> wrote:
> On Oct 13, 9:28 pm, "Richard Fry" <r...@adams.net> wrote:
>
> I must agree with Art, I think you have displayed a complete lack of
> good manners, what is written in private should stay as such unless
> agreed otherwise by both parties.
>
> Derek

Gentlemen
I tuned my antenna this afternoon for 1.9 Mhz where the S meter was
regesting S9 noise.
Put a sheet of aluminium under it and the noise stayed at S9
Now I need to put a sheet of aluminium on the top of it to form a
capacitor
but that I can't do by myself as I need another pair of hands to rest
it on the top.
Hopefully my niehbor will show his face sometime in the next couple of
weeks so I
can complete the experiment. I made the antenna as large as I could
so when
it is inbetween the two 8 X 4 sheets I will see a difference in
signal.
Time to mow the grass for the last time and empty the gas tank for the
winter.
Art KB9MZ

2340. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 21:41:44 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l435h3d7ahmrf0d1qav29hhbchp3e2ob7e@4ax.com>
Source record: 35522

On Sun, 14 Oct 2007 14:33:06 -0700, art <aunwin@insightbb.com> wrote:

>I tuned my antenna this afternoon for 1.9 Mhz where the S meter was
>regesting S9 noise.

Does this antenna get a gain of 3dB more noise?

73's
Richard Clark, KB7QHC

2341. Re: Looking for "mobile.exe" by AA6GL

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 21:53:57 UTC
From: ricknj10@hotmail.com
Message-ID: <47128f9c.117123265@news.optonline.net>
Source record: 35523

>
>Ok I've sent it. Rename the .oxo file to .exe . Your firewall might have
>rejected the .exe . Let me know if you get it ok.
>

If you guys have each others email addresses why are you posting all of your private correspondance here ? Just wondering, because it isn't contributing anything to the discussion of antennas which is what this newsgroup is all about.

2342. Re: Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 22:11:50 UTC
From: Dave <noone@nowhere.com>
Message-ID: <GuwQi.1156$W22.307@trndny04>
Source record: 35524

"Richard Fry" <rfry@adams.net> wrote in message
news:fettem$j7g$1@aioe.org...
> Art wrote:
>>....for the same power expended in the same amount of
> > time a full wave radiator radiates twice the power that a
>> quarter wave does.
> _________
>
> So then where does the missing power applied to the 1/4-wave radiator go,
> if only half of its input power is converted to EM radiation?
>
> RF

i am convinced that art is playing dumb on purpose.... no one with any knowledge of antennas and em fields could possible get this screwed up on basic concepts. when he was just talking 'gaussian' and 'equilibrium' stuff it could easily be laughed off as someone with a little bit of knowledge trying to force the rest of the world into that single concept. but now with decaying electrons and current down the center of the conductor and a missing half cycle its just too far gone. i had been kind of tagging along tweaking him into trying to explain the details of his concept, but now it is apparent that he has none. he is just making it up and stringing us along. you gone too far this time art, ciao and enjoy your game alone.

2343. Imbalance in doublet antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 22:16:53 UTC
From: cliff wright <c.c.wright@paradise.net.nz>
Message-ID: <47129551@clear.net.nz>
Source record: 35525

Good Day all!
Now I have my Kenwood ts-820S going on TX again I must turn my attention to another problem.
This is entirely a result of my house and section layout.
I have a G5RV antenna supported by a 7.5 metre mast in the centre on a quite steeply sloping section.
The antenna runs East/West. Now thw western (high) end is supported by my upper fence posts on top of a timber retaining wall totalling about 4 metres AGL. The antenna wire is substantially horizontal at that end.
The eastern end however has the problem of a mast of any greater than 3.5 metres high interfering with our neighbours view and they are very good neighbours!
As a result the eastern end of the G5RV slopes down at about 20 degrees and is only 3.5 metres AGL at the end.
Now I have noticed that my "Z" match antenna tuner is much more critical in adjustment than it used to be with a horizontal G5RV at my previous QTH.
Obviously the capacitance to ground will be very different between the 2 sides of the doublet and I have a fair amount of mains borne QRN here. Has anyone else sorted this problem, it will not be easy to move the antenna as my section is only 860 M2.
&3's Cliff Wright ZL1BDA ex G3NIA

2344. Imbalance in doublet antennas.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 22:16:53 UTC
From: cliff wright <c.c.wright@paradise.net.nz>
Message-ID: <248e1$47129d8f$4aded8bf$4853@EVERESTKC.NET>
Source record: 35527

Good Day all!
Now I have my Kenwood ts-820S going on TX again I must turn my attention to another problem.
This is entirely a result of my house and section layout.
I have a G5RV antenna supported by a 7.5 metre mast in the centre on a quite steeply sloping section.
The antenna runs East/West. Now thw western (high) end is supported by my upper fence posts on top of a timber retaining wall totalling about 4 metres AGL. The antenna wire is substantially horizontal at that end.
The eastern end however has the problem of a mast of any greater than 3.5 metres high interfering with our neighbours view and they are very good neighbours!
As a result the eastern end of the G5RV slopes down at about 20 degrees and is only 3.5 metres AGL at the end.
Now I have noticed that my "Z" match antenna tuner is much more critical in adjustment than it used to be with a horizontal G5RV at my previous QTH.
Obviously the capacitance to ground will be very different between the 2 sides of the doublet and I have a fair amount of mains borne QRN here. Has anyone else sorted this problem, it will not be easy to move the antenna as my section is only 860 M2.
&3's Cliff Wright ZL1BDA ex G3NIA

2345. Re: Looking for "mobile.exe" by AA6GL

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 22:45:57 UTC
From: Brian Howie <brian@nospam.demon.co.uk>
Message-ID: <w2ttSWAlwpEHFwSP@b-howie.demon.co.uk>
Source record: 35526

In message <47128f9c.117123265@news.optonline.net>, Rick
<ricknj10@hotmail.com> writes
>
>>
>>Ok I've sent it. Rename the .oxo file to .exe . Your firewall might have
>>rejected the .exe . Let me know if you get it ok.
>>
>
>If you guys have each others email addresses why are you posting all of your
>private correspondance here ? Just wondering, because it isn't contributing
>anything to the discussion of antennas which is what this newsgroup is all
>about.

Cos he didn't give me a real e-mail address

B

--
Brian Howie

2346. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 23:02:59 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <feu775$td7$1@news.albasani.net>
Source record: 35528

art wrote:

> ...
> Time to mow the grass for the last time and empty the gas tank for the
> winter.
> Art KB9MZ
>

Be lazy--just dump a bit of gas stabilizer in! ;-)

JS

2347. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 23:10:10 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <4712a1d2$0$32517$4c368faf@roadrunner.com>
Source record: 35529

>
> A minor update: It seems that I was _mis_tuning my antenna,
> adjusting it for the strongest signal (highest stack of LEDs lit).
> Over the past two days either I've finally tuned it _correctly_ or
> I've done that _and_ the signal has improved. Whatever the
> cause(s), I can now -- at times, in fact for an hour at a time --
> hear the tocks fairly clearly and even understand the voice. (Who
> knew the announcer's phrase for UTC "Coordinated Universal Time"?).
>
> How good? Well, I've unplugged the clock to reset it and it has
> then received an "acceptable" WWV signal (it started showing digits)
> eight times in the past two days. It might have been more times,
> but I don't watch it constantly, and I've noticed that twiddling the
> tuning knob tends to make sync-ing a little harder. ("Ack! It's
> fading! See if I can tune the antenna _just_ a little better!"
> <grin!>)

Locking in 8 times in 2 days is probably pretty good

Not sure what you are tuning but best signal to noise ratio is not always
synchronous with greatest gain.

Jimmie

2348. Re: Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 23:23:24 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192404204.532295.139590@e34g2000pro.googlegroups.com>
Source record: 35530

On 14 Oct, 15:11, "Dave" <no...@nowhere.com> wrote:
> "Richard Fry" <r...@adams.net> wrote in message
>
> news:fettem$j7g$1@aioe.org...
>
> > Art wrote:
> >>....for the same power expended in the same amount of
> > > time a full wave radiator radiates twice the power that a
> >> quarter wave does.
> > _________
>
> > So then where does the missing power applied to the 1/4-wave radiator go,
> > if only half of its input power is converted to EM radiation?
>
> > RF
>
> i am convinced that art is playing dumb on purpose.... no one with any
> knowledge of antennas and em fields could possible get this screwed up on
> basic concepts. when he was just talking 'gaussian' and 'equilibrium' stuff
> it could easily be laughed off as someone with a little bit of knowledge
> trying to force the rest of the world into that single concept. but now
> with decaying electrons and current down the center of the conductor and a
> missing half cycle its just too far gone. i had been kind of tagging along
> tweaking him into trying to explain the details of his concept, but now it
> is apparent that he has none. he is just making it up and stringing us
> along. you gone too far this time art, ciao and enjoy your game alone.

Awe common Dave don't go away this is fun! Now what is wrong with
current
going down the center because the impedance is less than 377 ohms?
Remember if you go up in altitude the 377 impedance will go down and
become
less that the wires internal impedance the energy will transfer to
space with
that smell of ozone. That is what happened in Quito Equador
That is what led to the design of the quad where a
lesser impedance path was provided for current flow!
Now the inner impedance of the wire must be pretty high to
create an end effect so with Isq R there has to be a lot of
heat generated. Remember Vincent saying his first antenna melted?
Now we come to rotation of a projectile.
Did you know that a projectile tumbles and comes under the influence
of the Corrioli effect as it losses energy.A shell
starts to tumble when it exceeds it's range Next time a rocket goes

into space watch for rotation. What do you think causes that?
A train speeds along on a railroad until at a certain speed
it will roll over, why do you think that happens?
Look up "hammer blow" for that one. How can
I possibly be stringing you along?
You can put everything to bed by spending
a 1/2 hour making a full wave antenna but ofcourse that
means an effort to get off the couch !
Yup
It is better to stay rested and let your mouth do
all the work at least until you start to dribble.
Art Unwin KB9MZ....XG

2349. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-14 23:55:19 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <4712ac64$0$32492$4c368faf@roadrunner.com>
Source record: 35531

"John Smith" <assemblywizard@gmail.com> wrote in message
news:feu775$td7$1@news.albasani.net...
> art wrote:
>
> > ...
>> Time to mow the grass for the last time and empty the gas tank for the
>> winter.
>> Art KB9MZ
>>
>
> Be lazy--just dump a bit of gas stabilizer in! ;-)
>
> JS

And crank it once a month

Jimmie

2350. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 00:13:57 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13h5c643u7qhs93@corp.supernews.com>
Source record: 35532

Frnak McKenney wrote:
>
> Ah. So even if it starts out in vertically polarized in Fort
> Collins 'way out thataway (he says, gesturing faintly west-ish)
> WWV's signal might be polarized north-north-west by the time it gets
> ro Richmond.

Not exactly. The wave will still be nearly planar, that is, the orientation of the E field will be in a plane which is perpendicular to a line between you and the effective point in the ionosphere where the wave is coming from. But the E field can be rotated in any direction within that plane. So you want your antenna to have substantial gain in the direction of Fort Collins and at the elevation angle of the arriving signal (the latter will vary somewhat). But the polarization is a crap shoot.

>
> Hm. Wonder if anyone has built an antenna whose polarization shifts
> to "best match" the incoming signal? (No, not _this_ weekend!
> <grin>!)

Sure, many. Polarization diversity is an old idea. In a previous life I worked on a phased array radar (cf. http://www.globalsecurity.org/space/systems/an-fps-85.htm). The transmitters have only horizontal dipole antennas so they transmit only a horizontally polarized signal. But each of the 4660 receivers has two dipole antennas, one vertical and one horizontal. This gives the receiver information about whether an object is tumbling or rotating, for example, by the way the polarization is shifted by the reflection. Amateurs would have to use polarization diversity at both ends of a contact, since there's no way to predict which polarization would be best at a given moment for transmitting to a fixed polarization receiving antenna.

>
> A minor update: It seems that I was _mis_tuning my antenna,
> adjusting it for the strongest signal (highest stack of LEDs lit).
> Over the past two days either I've finally tuned it _correctly_ or
> I've done that _and_ the signal has improved. Whatever the
> cause(s), I can now -- at times, in fact for an hour at a time --
> hear the tocks fairly clearly and even understand the voice. (Who
> knew the announcer's phrase for UTC "Coordinated Universal Time"?).
>
> How good? Well, I've unplugged the clock to reset it and it has
> then received an "acceptable" WWV signal (it started showing digits)

> eight times in the past two days. It might have been more times,
> but I don't watch it constantly, and I've noticed that twiddling the
> tuning knob tends to make sync-ing a little harder. ("Ack! It's
> fading! See if I can tune the antenna _just_ a little better!"
> <grin!>)

Be cautious in generalizing about your accomplishments. Day-to-day propagation differences can be extreme. Unless you can do an immediate A-B comparison or take many, many measurements over a very long period of time, there's no way to distinguish between antenna and propagation changes.

> . . .

> I do a lot of reading in comp.dsp (sometimes it's fun just watching
> the phrases fly back and forth <grin!>), and one common topic there
> is the difference between "noise" and "signal". For me, "signal" is
> "what I want", "noise" is "everything else", and the fun(?) part is
> figuring out how to get as much of the former as I can while
> downplaying or being able to ignore the effects of the latter. My
> next step is to add a "line out" jack to the MAC-II so I can capture
> long stretches of the signal to disk; when reception goes bad again
> I'll be able to use Scilab or Matlab or something to play "Beat the
> Heathkit!" with my own algorithms.

The whole objective to receiving system design is to maximize the signal/noise ratio, where "noise" is "everything you don't want". Making both larger by the same amount accomplishes nothing you can't do with a simple amplifier.

>. . .

Roy Lewallen, W7EL

2351. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 00:20:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13h5cifiat1c69@corp.supernews.com>
Source record: 35533

Frnak McKenney wrote:
>
> If I'm following the ARRL handbook correctly, I want the elements
> laid out _across_ the incoming wavefront. For Fort Collins to
> Richmond, that is, going west to east, that would mean I'd want to
> string the wires/elements north-south. Naturally (per Murphy, the
> patron saint of Data Processing) my house is oriented E-W. Which
> does still, as you point out, leave the possibility of building
> something outdoors.

You're following it correctly only if you're using elements which are no longer than about 5/4 wavelength. The direction of maximum gain isn't longer perpendicular to the wire if the wire is longer. This is covered very will in the _Antenna Book_.
>
> Still, my current indoor loop seems to be picking up a nice strong
> signal. It was upright when I first started testing, but it wound up
> being laid flat at some point in the past few days -- about the time
> I discovered that I had been mis-tuining it. Wonder which had more
> effect: my changes, or atmospherics? <grin!>

As I mentioned in my other recent posting, there's no way for you to tell.

> Anyway, thank you for your time and suggestions. I did some looking
> around on the 'web for introductory material to help me understand
> the ARRL Antenna Handbook and stumbled onto these:
>
> Antenna Newcomers and the Language of Antennas
> http://www.cebik.com/tales/nc.html
>
> Antennas from the Ground Up
> http://www.cebik.com/gup/groundup.html
>
> Some really nice propagation plots. Now, if there were just some
> simple way of figuring out which way the antenna is oriented
> relative to the plots... "It's an imperfect universe" <grin!>

You can duplicate the plots for the kinds of simple antennas you're dealing with, with the free demo version of EZNEC available from http://eznec.com. In the View Antenna display, select View/Objects, then check the "2D Display" box. Then you'll see a 2D plot superimposed on the view of the antenna, to show how the two are related. When viewing a 3D plot, the View Antenna display rotates along with the 3D pattern, so you can see how they're related if you keep both windows open.

Roy Lewallen, W7EL

2352. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 01:11:21 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <4712be2e$0$11068$4c368faf@roadrunner.com>
Source record: 35534

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:13h5cifiat1c69@corp.supernews.com...
> Frnak McKenney wrote:
>>
>> If I'm following the ARRL handbook correctly, I want the elements
>> laid out _across_ the incoming wavefront. For Fort Collins to
>> Richmond, that is, going west to east, that would mean I'd want to
>> string the wires/elements north-south. Naturally (per Murphy, the
>> patron saint of Data Processing) my house is oriented E-W. Which
>> does still, as you point out, leave the possibility of building
>> something outdoors.
>
> You're following it correctly only if you're using elements which are no
> longer than about 5/4 wavelength. The direction of maximum gain isn't
> longer perpendicular to the wire if the wire is longer. This is covered
> very will in the _Antenna Book_.
>>
>> Still, my current indoor loop seems to be picking up a nice strong
>> signal. It was upright when I first started testing, but it wound up
>> being laid flat at some point in the past few days -- about the time
>> I discovered that I had been mis-tuining it. Wonder which had more
>> effect: my changes, or atmospherics? <grin!>
>
> As I mentioned in my other recent posting, there's no way for you to tell.
>
>> Anyway, thank you for your time and suggestions. I did some looking
>> around on the 'web for introductory material to help me understand
>> the ARRL Antenna Handbook and stumbled onto these:
>>
>> Antenna Newcomers and the Language of Antennas
>> http://www.cebik.com/tales/nc.html
>>
>> Antennas from the Ground Up
>> http://www.cebik.com/gup/groundup.html
>>
>> Some really nice propagation plots. Now, if there were just some
>> simple way of figuring out which way the antenna is oriented
>> relative to the plots... "It's an imperfect universe" <grin!>
>
> You can duplicate the plots for the kinds of simple antennas you're
> dealing with, with the free demo version of EZNEC available from
> http://eznec.com. In the View Antenna display, select View/Objects, then
> check the "2D Display" box. Then you'll see a 2D plot superimposed on the
> view of the antenna, to show how the two are related. When viewing a 3D

> plot, the View Antenna display rotates along with the 3D pattern, so you
> can see how they're related if you keep both windows open.
>
> Roy Lewallen, W7EL

Normally WWV rxceivers have there antennas tilted at 45 degrees in an attempt at polarity diversity. Im not sure if the department store clocks do anything like this. The only one I have ever seen used a loopstic antenna. The professional grade rx I am familar with that was used to set the time on a computer used a contuously loaded dipole on an outside mount with 45 degree polarization.

Jimmie

2353. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 02:41:09 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13h5kq3sdkpbmee@corp.supernews.com>
Source record: 35535

Jimmie D wrote:
>
> Normally WWV rxceivers have there antennas tilted at 45 degrees in an
> attempt at polarity diversity. Im not sure if the department store clocks do
> anything like this. The only one I have ever seen used a loopstic antenna.
> The professional grade rx I am familar with that was used to set the time on
> a computer used a contuously loaded dipole on an outside mount with 45
> degree polarization.

Chuckle

Tilting would work fine if an incoming wave couldn't have any polarization except vertical or horizontal. But it can -- it can be at any angle. So it doesn't matter how you tilt the antenna, the probability of the incoming wave's polarization being aligned with it, at right angles to it, or having any other relationship to it, is the same as for any other tilt. (For simplicity, I'm ignoring the fact that the probability of a wave arriving with a particular polarization angle varies with the elevation angle when ground reflection is involved -- which it virtually always is with HF skip propagation.)

A 45 degree tilt might be useful if you were receiving a line-of-sight signal which might come from either a horizontally or vertically polarized antenna. But even then, if the transmitter's antenna was tilted 45 degrees the other way, you'd be cross polarized and in the same boat as if one were horizontal and the other vertical.

One solution is a circularly polarized antenna, which responds equally well to linearly polarized waves at any polarization angle. However, there are a few problems involved with that. First, it's difficult to get circular polarization from an antenna when ground reflections are involved. Second, most of the simpler circularly polarized antennas like a turnstile are circularly polarized in only one or two directions. For that antenna, for example, the polarization is elliptical at other azimuths and elevation angles, and linear to the side. And finally, it seems to me possible that ionospheric propagation can cause a received signal to be elliptically polarized even though it's linear when it's transmitted. I don't know if this is the case, but if it is, it guarantees that even a circularly polarized antenna would experience fading from polarization shift. Of course, even if you completely eliminate fading from polarization shift, you still have to deal with multipath.

Roy Lewallen, W7EL

2354. Re: Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 03:30:08 UTC
From: Walter Maxwell <walt@w2du.com>
Message-ID: <9vl5h3pivl3iarrnbiimhr3m0ufsdittct@4ax.com>
Source record: 35536

On Sun, 14 Oct 2007 13:01:30 -0700, art <aunwin@insightbb.com> wrote:

>On 14 Oct, 10:54, art <aun...@insightbb.com> wrote:
>> On 14 Oct, 08:07, "Dave" <no...@nowhere.com> wrote:
>>
>>
>>
>>
>>
>> > "art" <aun...@insightbb.com> wrote in message
>>
>> >news:1192372511.805367.192630@y27g2000pre.googlegroups.com...
>>
>> > > Equi is for equal, libra is the sign of Zodiac which is a pair of
>> > > scales
>>
>> > > It means that a repetitive action must come back to its source.
>> > > AC power has a cycle as in frequency, thus its circuit is one
>> > > wavelength.
>>
>> > > A quad antenna represents a one wave circuit where total length is
>> > > proportionat
>> > > to time .ie a picture of events during one cycle.
>> > > Now place along side of the quad a radiator of your choice where
>> > > the length of the short radiator is superimposed upon the quad.
>> > > For ease in foillowing the electrical circuit make your shorty
>> > > antenna
>> > > equal to one side of the quad
>>
>> > > So the race begins. Both travel up for a time at the SAME velocity.
>> > > At the corner of the quad power travels onward until it gets to its
>> > > originating point to complete a cycle
>> > > The short antenna appears to have nowhere to go so what does it do?
>> > > To duplicate the quad action it must have a circuit of some sort where
>> > > the power can still travel forward during the time the power in the
>> > > quad
>> > > is still travelling to the originating point.
>>
>> > > Complete the circuit of the short antenna showing the series of events
>> > > that occur upto the point that the events on the quad come to its
>> > > point of beginning.
>>
>> > > Note The impedance of space is 377 ohms, the impedance of ground can
>> > > be your choice.

>> > > Art
>>
>> > but a wave comes back to it starting point after 1/2 cycle then reverses.
>> > so why does your original assertion of a 1/2 wave 'gaussian' antenna still
>> > hold? now, for a 1/4 wave monopole, where does the other 3/4's of a wave
>> > come from?? and what happens to the power that is radiated? how does that
>> > ever return to it's source to be in equilibrium? would a circuit that was
>> > in equilibrium not be capable of radiating response
>>
>> David
>> you have a broken brain, you have to
>> consult all parts of your brain as with
>> a committee. Thus your questions
>> are those that come from a committee
>> which never solves anything
>> By the way the radiator is just a small part of our solar system.
>> The radiation particles can only come to rest on a diamagnet material
>> so accuse your listener of stealing your radiation energy at least
>> those particles that do arrive while others decay
>> Art- Hide quoted text -
>>
>> - Show quoted text -
>
>Now with respect to the current loop formed on the short antenna.
>This loop defies the existing conception that a short radiator
>is a series circuit but instead it is a parallel circuit ala tank
>circuit mode
>Where the energy sinks explode such that they put electrons in a orbit
>mode as they travel because of their tenacity with respect to their
>initial
>resistance to motion(inertia)as they lay dormant on the outside of a
>diagmatic material.
>Diagmatic material is a material that will allow an electron to rest
>on it's surface
>without being combined into the basic material that consists of an
>atom and a lot
>of other stuff that is in orbit and in equilibrium of itself.
>Note that the electron that is now in orbit and is not polar, thus it
>is not
>affected by gravity on its travels on it's way to find a suitable
>resting spot
>(diagmatic surface)which can also be outside the earths sphere of
>presence and
> come to rest on another planets surface in the same way that moon
>dust occurs.
>NASA has had some success of blowing the moon dust off of material by
>mimicing
>a tank circuit using just one energy sink release where they were
>able to remove
> half of the moon dust or overcome it's inertia. Apparently they do

>not want
> this dust transported to the space vehicle. Note that while in
>rotation the electron
>posseses both weight and energy where the latter does decay over time
>though its
>weight stays dormant.Note that a diagmatic material has lots of
>"spare" electrons
> that imediately take the place of removed electrons and where it
>prevents the
>resetlement of electrons that do not escape the arbitary field around
>the host
> material forcing the returning electrons to reside under existing
>surface
> electrons to form a "skin depth" where they eventually decay.
>Enuff said.
>Gauss was on the right track when he decided to work at the
>observatory.
>Pity he didn't delay things and apply a time varying field to
>accompany
>his law on statics. But no worries a hundred years later along came
>Art.
>Art Unwin KB9MZ....XG (uk)

Hi Art,

It's a dawgone shame that the electronic wizards on this thread don't have a clue that you're pulling their
legs with your humorous anecdotes concerning the clever antics you have the electrons engaging in. I don't
know the acronym to tell of my response in shorthand, but I'm rolling on the floor in hysterical laughter at
your brilliant forays into your comedic repertoire.

Art, I assume yer retired, and may have somewhat of a nest egg to support the lifestyle yer accustomed to, but
let me tell ya, yer missing a golden opportunity to multiply that nest egg exponentially. How could you do
that? Well, ya know there's Leno, and there's that Dave what's-his-name, Oyeah, Letterman, and they both need
writers for their one liners, who are becoming stale lately. They could use your comedic talents if they plan
to stay in their present jobs. And then there's also Jimmie Kimmell, who's really going places. Just think of
how much faster he'd get there if you were writing for him!!!

Art, with all yer talent yer wasting yer time tryin' to fool the wizards on this thread, cuz they just don't
get it. They're all wound up so tight trying to explain to you how electrons radiate that they don't know that
all yer writing is fer comedic entertainment that's apparently going right over their heads.

I'm enjoying every minute of your entertainment presentations, and I'd miss them dearly if you left the
thread. But your talents would be much more appreciated if your writings were to be presented to the national
TV audiences, on whichever channel you choose to present yer work.

Sincerely yers,

Walt, W2DU

2355. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 03:38:57 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192419537.350128.29720@y27g2000pre.googlegroups.com>
Source record: 35537

On 14 Oct, 19:41, Roy Lewallen <w...@eznec.com> wrote:
> Jimmie D wrote:
>
> > Normally WWV rxceivers have there antennas tilted at 45 degrees in an
> > attempt at polarity diversity. Im not sure if the department store clocks do
> > anything like this. The only one I have ever seen used a loopstic antenna.
> > The professional grade rx I am familar with that was used to set the time on
> > a computer used a contuously loaded dipole on an outside mount with 45
> > degree polarization.
>
> *Chuckle*
>
> Tilting would work fine if an incoming wave couldn't have any
> polarization except vertical or horizontal. But it can -- it can be at
> any angle. So it doesn't matter how you tilt the antenna, the
> probability of the incoming wave's polarization being aligned with it,
> at right angles to it, or having any other relationship to it, is the
> same as for any other tilt. (For simplicity, I'm ignoring the fact that
> the probability of a wave arriving with a particular polarization angle
> varies with the elevation angle when ground reflection is involved --
> which it virtually always is with HF skip propagation.)
>
> A 45 degree tilt might be useful if you were receiving a line-of-sight
> signal which might come from either a horizontally or vertically
> polarized antenna. But even then, if the transmitter's antenna was
> tilted 45 degrees the other way, you'd be cross polarized and in the
> same boat as if one were horizontal and the other vertical.
>
> One solution is a circularly polarized antenna, which responds equally
> well to linearly polarized waves at any polarization angle.

snip
Doesn't a circular polarized antenna lose 3 db when responding to
linearly polarised waves?
IF that is the case it doesn't "respond equally as well"
As far as 45 degrees goes that is not correct for maximum response,
more likely a 45 +- 11 degrees would supply the most gain.
Kraus refers to this empirical tilt action in his chaptor on helix
antennas
which I now see as the summation of all radiator vectors when
expanding Gauss.
Art

2356. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 06:28:18 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <47130883$0$7512$4c368faf@roadrunner.com>
Source record: 35538

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:13h5kq3sdkpbmee@corp.supernews.com...
> Jimmie D wrote:
>>
>> Normally WWV rxceivers have there antennas tilted at 45 degrees in an
>> attempt at polarity diversity. Im not sure if the department store clocks
>> do anything like this. The only one I have ever seen used a loopstic
>> antenna. The professional grade rx I am familar with that was used to set
>> the time on a computer used a contuously loaded dipole on an outside
>> mount with 45 degree polarization.
>
> *Chuckle*
>
> Tilting would work fine if an incoming wave couldn't have any polarization
> except vertical or horizontal. But it can -- it can be at any angle. So it
> doesn't matter how you tilt the antenna, the probability of the incoming
> wave's polarization being aligned with it, at right angles to it, or
> having any other relationship to it, is the same as for any other tilt.
> (For simplicity, I'm ignoring the fact that the probability of a wave
> arriving with a particular polarization angle varies with the elevation
> angle when ground reflection is involved --
> which it virtually always is with HF skip propagation.)
>
> A 45 degree tilt might be useful if you were receiving a line-of-sight
> signal which might come from either a horizontally or vertically polarized
> antenna. But even then, if the transmitter's antenna was tilted 45 degrees
> the other way, you'd be cross polarized and in the same boat as if one
> were horizontal and the other vertical.

Like I said it was an attempt, reccomended by the manufacturer of the rx no
less. I always got a chuckle out of it too, every time I saw it. A member of
our engineering staff went into a long spiel about why it should be mounted
at 45 degrees. Thats when I asked him what college he attended because I
didnt want my kids going there. A few days later he sent me an email
apologizing and admitted I was right that it really doesnt matter which way
its turned.

Jimmie

2357. Re: Looking for "mobile.exe" by AA6GL

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 06:35:04 UTC
From: "Raphael.J" <pasdemail@free.fr>
Message-ID: <47130a16$0$5092$ba4acef3@news.orange.fr>
Source record: 35539

> If you guys have each others email addresses why are you posting all of
> your
> private correspondance here ? Just wondering, because it isn't
> contributing
> anything to the discussion of antennas which is what this newsgroup is all
> about.

HOo my god !!
Did you read precedents posts ?

2358. Re: Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 06:40:09 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <47130b48$0$32490$4c368faf@roadrunner.com>
Source record: 35540

"Walter Maxwell" <walt@w2du.com> wrote in message
news:9vl5h3pivl3iarrnbiimhr3m0ufsdittct@4ax.com...
> On Sun, 14 Oct 2007 13:01:30 -0700, art <aunwin@insightbb.com> wrote:
>
>>On 14 Oct, 10:54, art <aun...@insightbb.com> wrote:
>>> On 14 Oct, 08:07, "Dave" <no...@nowhere.com> wrote:
>>>
>>>
>>>
>>>
>>>
>>> > "art" <aun...@insightbb.com> wrote in message
>>>
>>> >news:1192372511.805367.192630@y27g2000pre.googlegroups.com...
>>>
>>> > > Equi is for equal, libra is the sign of Zodiac which is a pair of
>>> > > scales
>>>
>>> > > It means that a repetitive action must come back to its source.
>>> > > AC power has a cycle as in frequency, thus its circuit is one
>>> > > wavelength.
>>>
>>> > > A quad antenna represents a one wave circuit where total length is
>>> > > proportionat
>>> > > to time .ie a picture of events during one cycle.
>>> > > Now place along side of the quad a radiator of your choice where
>>> > > the length of the short radiator is superimposed upon the quad.
>>> > > For ease in foillowing the electrical circuit make your shorty
>>> > > antenna
>>> > > equal to one side of the quad
>>>
>>> > > So the race begins. Both travel up for a time at the SAME velocity.
>>> > > At the corner of the quad power travels onward until it gets to its
>>> > > originating point to complete a cycle
>>> > > The short antenna appears to have nowhere to go so what does it do?
>>> > > To duplicate the quad action it must have a circuit of some sort
>>> > > where
>>> > > the power can still travel forward during the time the power in the
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>>> > > is still travelling to the originating point.
>>>
>>> > > Complete the circuit of the short antenna showing the series of
>>> > > events
>>> > > that occur upto the point that the events on the quad come to its

>>> > > point of beginning.
>>>
>>> > > Note The impedance of space is 377 ohms, the impedance of ground can
>>> > > be your choice.
>>> > > Art
>>>
>>> > but a wave comes back to it starting point after 1/2 cycle then
>>> > reverses.
>>> > so why does your original assertion of a 1/2 wave 'gaussian' antenna
>>> > still
>>> > hold? now, for a 1/4 wave monopole, where does the other 3/4's of a
>>> > wave
>>> > come from?? and what happens to the power that is radiated? how does
>>> > that
>>> > ever return to it's source to be in equilibrium? would a circuit that
>>> > was
>>> > in equilibrium not be capable of radiating response
>>>
>>> David
>>> you have a broken brain, you have to
>>> consult all parts of your brain as with
>>> a committee. Thus your questions
>>> are those that come from a committee
>>> which never solves anything
>>> By the way the radiator is just a small part of our solar system.
>>> The radiation particles can only come to rest on a diamagnet material
>>> so accuse your listener of stealing your radiation energy at least
>>> those particles that do arrive while others decay
>>> Art- Hide quoted text -
>>>
>>> - Show quoted text -
>>
>>Now with respect to the current loop formed on the short antenna.
>>This loop defies the existing conception that a short radiator
>>is a series circuit but instead it is a parallel circuit ala tank
>>circuit mode
>>Where the energy sinks explode such that they put electrons in a orbit
>>mode as they travel because of their tenacity with respect to their
>>initial
>>resistance to motion(inertia)as they lay dormant on the outside of a
>>diagmatic material.
>>Diagmatic material is a material that will allow an electron to rest
>>on it's surface
>>without being combined into the basic material that consists of an
>>atom and a lot
>>of other stuff that is in orbit and in equilibrium of itself.
>>Note that the electron that is now in orbit and is not polar, thus it
>>is not
>>affected by gravity on its travels on it's way to find a suitable
>>resting spot

>>(diagmatic surface)which can also be outside the earths sphere of
>>presence and
>> come to rest on another planets surface in the same way that moon
>>dust occurs.
>>NASA has had some success of blowing the moon dust off of material by
>>mimicing
>>a tank circuit using just one energy sink release where they were
>>able to remove
>> half of the moon dust or overcome it's inertia. Apparently they do
>>not want
>> this dust transported to the space vehicle. Note that while in
>>rotation the electron
>>posseses both weight and energy where the latter does decay over time
>>though its
>>weight stays dormant.Note that a diagmatic material has lots of
>>"spare" electrons
>> that imediately take the place of removed electrons and where it
>>prevents the
>>resetlement of electrons that do not escape the arbitary field around
>>the host
>> material forcing the returning electrons to reside under existing
>>surface
>> electrons to form a "skin depth" where they eventually decay.
>>Enuff said.
>>Gauss was on the right track when he decided to work at the
>>observatory.
>>Pity he didn't delay things and apply a time varying field to
>>accompany
>>his law on statics. But no worries a hundred years later along came
>>Art.
>>Art Unwin KB9MZ....XG (uk)
>
> Hi Art,
>
> It's a dawgone shame that the electronic wizards on this thread don't have
> a clue that you're pulling their
> legs with your humorous anecdotes concerning the clever antics you have
> the electrons engaging in. I don't
> know the acronym to tell of my response in shorthand, but I'm rolling on
> the floor in hysterical laughter at
> your brilliant forays into your comedic repertoire.
>
> Art, I assume yer retired, and may have somewhat of a nest egg to support
> the lifestyle yer accustomed to, but
> let me tell ya, yer missing a golden opportunity to multiply that nest egg
> exponentially. How could you do
> that? Well, ya know there's Leno, and there's that Dave what's-his-name,
> Oyeah, Letterman, and they both need
> writers for their one liners, who are becoming stale lately. They could
> use your comedic talents if they plan

> to stay in their present jobs. And then there's also Jimmie Kimmell, who's
> really going places. Just think of
> how much faster he'd get there if you were writing for him!!!
>
> Art, with all yer talent yer wasting yer time tryin' to fool the wizards
> on this thread, cuz they just don't
> get it. They're all wound up so tight trying to explain to you how
> electrons radiate that they don't know that
> all yer writing is fer comedic entertainment that's apparently going right
> over their heads.
>
> I'm enjoying every minute of your entertainment presentations, and I'd
> miss them dearly if you left the
> thread. But your talents would be much more appreciated if your writings
> were to be presented to the national
> TV audiences, on whichever channel you choose to present yer work.
>
> Sincerely yers,
>
> Walt, W2DU

It took me a while to figure out if Art was a nut or a genious. I believe he is truly a genious, not about antennas but an expert troll artist

Jimmie

2359. Re: Looking for "mobile.exe" by AA6GL

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 06:45:56 UTC
From: "Raphael.J" <pasdemail@free.fr>
Message-ID: <47130ca2$0$25923$ba4acef3@news.orange.fr>
Source record: 35391

I didn't received anything yet Brian...but it doesn't matter : I don't want to disturb more that forum...

Thank's a lot Brian

2360. Re: Antenna book

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 06:58:20 UTC
From: Dave <someplace@nowhere-nice.com>
Message-ID: <47130f8a@212.67.96.135>
Source record: 35392

Richard Clark wrote:

>> http://www.medphys.ucl.ac.uk/research/borl/homepages/davek/phd/phd.html
>
> Hi Dave,
>
> Interesting thesis.
>
> 73's
> Richard Clark, KB7QHC

Thank you,
G8WRB

2361. Circuit diagram EA 3011 12V/10A power supply

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 10:12:24 UTC
From: Wimpie <wimtel@tetech.nl>
Message-ID: <1192443144.491269.149950@v23g2000prn.googlegroups.com>
Source record: 35393
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna

Hello,

I have some problems with an Elektro-Automatik EA 3011 12V/10A power
supply. Does somebody own the circuit diagram of this power supply?
It saves me a lot of time from extracting it from the PCB.

Best regards,

Wim
PA3DJS
www.tetech.nl

2362. Re: Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 14:53:04 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fevusl$t59$1@aioe.org>
Source record: 35394

"Dave" wrote about Art's posts:
> i am convinced that art is playing dumb on purpose.... no one with
> any knowledge of antennas and em fields could possible get this
> screwed up on basic concepts.

and Walt W2DU wrote:

> I'm enjoying every minute of your entertainment presentations, and
> I'd miss them dearly if you left the thread

Art could really know better, and might be posting what he does as some form of personal amusement.

The only problem with that is some readers of his posts may think his posts are accurate, unless others who know they are not make the effort to post the correct information.

RF

2363. Foursquare arrays of 40M verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 15:47:16 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1192463236.358699.324340@q5g2000prf.googlegroups.com>
Source record: 35395

I am seriously lusting over the concept of putting together a foursquare array of 40M verticals.

I found the http://www.zerofive-antennas.com/ website and the antenna part looks do-able. If a bit heavy-duty!

I think I have the space in the yard to put down the radials. The house gets in the way of one direction but I think I can put down at least quarter-wavelength radials from each base in all directions and half-wavelength or longer in some other directions.

I have some old ARRL antenna handbooks with articles by Roy Lewallen about phasing arrays and measurements. I also have EZNEC. Is there something I can do to prove to myself that having my house on one side of the array and the edge of my lot on the other side of the array, resulting in a radial plane that's not radial but more like a rectangle, won't mess up the whole concept?

And if I draw things out it looks like an 80M foursquare array would be possible but my house would be in the middle of it :-). Is this a recipe for disaster or would it actually work? (Not that I could afford four 75-foot vertical radiators from zerofive, but I can imagine!)

Tim.

2364. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 16:06:49 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ff036p$mp8$1@news.jpl.nasa.gov>
Source record: 35397

Frnak McKenney wrote:
>
>
> Hm. Wonder if anyone has built an antenna whose polarization shifts
> to "best match" the incoming signal? (No, not _this_ weekend!
> <grin>!)

Yes, such things have been built. There are some French researchers who built an adaptive combiner that combined multiple polarizations, and also did the processing to allow using both the ordinary and extraordinary ray, and substantially improved link reliability on 1000km skywave paths.

>
> A minor update: It seems that I was _mis_tuning my antenna,
> adjusting it for the strongest signal (highest stack of LEDs lit).
> Over the past two days either I've finally tuned it _correctly_ or
> I've done that _and_ the signal has improved. Whatever the
> cause(s), I can now -- at times, in fact for an hour at a time --
> hear the tocks fairly clearly and even understand the voice. (Who
> knew the announcer's phrase for UTC "Coordinated Universal Time"?).

UTC is not an acronym. It's a madeup identifier that matches neither the English (Coordinated Universal Time) or the French (T U C.. I won't even attempt to figure out what it is..).

These sorts of international metrology things have all sorts of such negotiated compromises in them, stemming all the way back to the Prime Meridian being in Greenwich, but measuring in meters.

2365. Re: Foursquare arrays of 40M verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 16:55:50 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <st57h35qodcg55ok2dncq0ofpdn2te4vu5@4ax.com>
Source record: 35396

On Mon, 15 Oct 2007 08:47:16 -0700, Tim Shoppa
<shoppa@trailing-edge.com> wrote:

>I think I can put down at
>least quarter-wavelength radials from each base in all directions and
>half-wavelength or longer in some other directions.

Hi Tom,

Radials, on/in the ground, do not need to be fractional wavelength
multiples (eighth, quarter, half...). Length = radiator height is
fine, shorter and more is roughly equivalent.

>Is there
>something I can do to prove to myself that having my house on one side
>of the array and the edge of my lot on the other side of the array,
>resulting in a radial plane that's not radial but more like a
>rectangle, won't mess up the whole concept?

No, probably not. And if it proved anything, what could you do about
it anyway?

>And if I draw things out it looks like an 80M foursquare array would
>be possible but my house would be in the middle of it :-). Is this a
>recipe for disaster or would it actually work?

No, not a disaster. It probably might/might-not work.

Radials are for matching and efficiency. They do impact lobe shape,
but in the scheme of things (a four-square) you are already managing
that detail and the lobe offsets probably average out anyway.

What I mean is that if you located each element in the corner of your
lot (hypothetical, as set-backs for neighbors and guying will probably
force another configuration); then you would have a radial field at
each one that could only fill 90 degrees of the circle expected at
each (for a pristine, factory guaranteed installation). The lack of
3/4ths of those radials would bring loss. The lack of 3/4ths of those
radials would reduce signal strength in those un-radialed directions.

However, you have three others that do point in those directions
filling in all 4/4ths - as an average. You still suffer the ground
loss, true, but the ground coverage you do have probably stiffens the
system sufficiently to exhibit the expected beam forming - I presume
this is the feature you are after.

73's
Richard Clark, KB7QHC

2366. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 17:40:24 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ff08mh$5un$1@news.albasani.net>
Source record: 35398

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

http://www.sys-con.com/read/442746.htm

JS

2367. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 18:00:37 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <k487h3d5tkgs4eab3qc8spbtohispjpktt@4ax.com>
Source record: 35399

On Mon, 15 Oct 2007 09:06:49 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>> hear the tocks fairly clearly and even understand the voice. (Who
>> knew the announcer's phrase for UTC "Coordinated Universal Time"?).
>
>UTC is not an acronym. It's a madeup identifier that matches neither
>the English (Coordinated Universal Time) or the French (T U C.. I won't
>even attempt to figure out what it is..).

Hi All,

In fact, UTC is an acronym (already anticipated by Frnak and
explicitly stated every minute). It is but one of several, this one
being rather genericized (because any longer would force a lot of
talking, and minute passes by pretty quickly). The others would
include: UTC(NIST), UT1; and the academic UT0, and UT2.

The reason for the initials order is that there is an hidden comma.
Universal Time, Coordinated. Wikipedia reports this as an erroneous
expansion, but Wikipedia wasn't there in my Metrology classes (a
couple dozen miles from NBS) where we worked with these NBS standards.
It wasn't there when (1974) I performed the second leap second on my
Cesium Beam Standard which was calibrated through WWVB (taking about
half an hour, part of which was waiting during the roughly 15 minute
intervals between TOCs). My antenna was so far away (on the fantail
of the ship in another "time zone"), that I had to slip the time by
100nS.

Knowing that Arthur only reads his own threads, I won't have to
anticipate his rejection of the following efficiency reports for a
non-gaussian antenna. From NIST (the people who know efficiency)
about their 60KHz antenna system:

"Each antenna is a top loaded monopole consisting of
four 122-m towers arranged in a diamond shape.
A system of cables, often called a capacitance hat or
top hat, is suspended between the four towers.
This top hat is electrically isolated from the towers,
and is electrically connected to a downlead suspended
from the center of the top hat. The downlead serves
as the radiating element.

"Ideally, an efficient antenna system requires a
radiating element that is at least one-quarter wavelength
long. At 60 kHz, this becomes difficult. The wavelength is

5000 m, so a one-quarter wavelength antenna would be 1250 m tall, or about 10 times the height of the WWVB antenna towers. As a compromise, some of the missing length was added horizontally to the top hats of this vertical dipole, and the downlead of each antenna is terminated at its own helix house under the top hats. Each helix house contains a large inductor to cancel the capacitance of the short antenna and a variometer (variable inductor) to tune the antenna system.

"Using two transmitters and two antennas allows the station to be more efficient. As mentioned earlier, the WWVB antennas are physically much smaller than one quarter wavelength. As the length of a vertical radiator becomes shorter compared to wavelength, the efficiency of the antenna goes down. In other words, it requires more and more transmitter power to increase the effective radiated power. The north antenna system at WWVB has an efficiency of about 50.6%, and the south antenna has an efficiency of about 57.5%. However, the combined efficiency of the two antennas is about 65%. As a result, each transmitter only has to produce a forward power of about 38 kW for WWVB to produce its effective radiated power of 50 kW."

73's
Richard Clark, KB7QHC

2368. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 19:38:56 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192477136.919875.107720@v23g2000prn.googlegroups.com>
Source record: 35400

On 14 Oct, 16:55, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
> "John Smith" <assemblywiz...@gmail.com> wrote in message
>
> news:feu775$td7$1@news.albasani.net...
>
> > art wrote:
>
> > > ...
> >> Time to mow the grass for the last time and empty the gas tank for the
> >> winter.
> >> Art KB9MZ
>
> > Be lazy--just dump a bit of gas stabilizer in! ;-)
>
> > JS
>
> And crank it once a month
>
> Jimmie

Finally got the aluminium sheets secured and now I have to find a
microphone
so I can work some low power over the next two weeks.
I am anxious to see if it will duplicale the bottom antenna of a stack
where
the capacitor/antenna bleeds off noise to the ground.
Antenna will stay sitting on the ground until I get a feel of how it
reacts in the coming days of showers.
It is set up as a cloud burner at the moment so I should get some
contacts.
All bands seem to be active so I will put a chair in the yard and play
Maybe even take a photo for the record!
Plenty of harmonics so most bands should be available
Art
Art

2369. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 19:48:48 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <AuPQi.682728$p47.455921@bgtnsc04-news.ops.worldnet.att.net>
Source record: 35401

Richard Clark wrote:

>
> Knowing that Arthur only reads his own threads, I won't have to
> anticipate his rejection of the following efficiency reports for a
> non-gaussian antenna. From NIST (the people who know efficiency)
> about their 60KHz antenna system:
>
> "Each antenna is a top loaded monopole consisting of
> four 122-m towers arranged in a diamond shape.
> A system of cables, often called a capacitance hat or
> top hat, is suspended between the four towers.
> This top hat is electrically isolated from the towers,
> and is electrically connected to a downlead suspended
> from the center of the top hat. The downlead serves
> as the radiating element.
>
> "Ideally, an efficient antenna system requires a
> radiating element that is at least one-quarter wavelength
> long. At 60 kHz, this becomes difficult. The wavelength is
> 5000 m, so a one-quarter wavelength antenna would be
> 1250 m tall, or about 10 times the height of the WWVB
> antenna towers. As a compromise, some of the missing
> length was added horizontally to the top hats of this
> vertical dipole, and the downlead of each antenna is
> terminated at its own helix house under the top hats.
> Each helix house contains a large inductor to cancel
> the capacitance of the short antenna and a
> variometer (variable inductor) to tune the antenna
> system.
>
> "Using two transmitters and two antennas allows the
> station to be more efficient. As mentioned earlier, the
> WWVB antennas are physically much smaller than
> one quarter wavelength. As the length of a vertical
> radiator becomes shorter compared to wavelength,
> the efficiency of the antenna goes down. In other words,
> it requires more and more transmitter power to increase
> the effective radiated power. The north antenna system
> at WWVB has an efficiency of about 50.6%, and the
> south antenna has an efficiency of about 57.5%.
> However, the combined efficiency of the two antennas
> is about 65%. As a result, each transmitter only has to
> produce a forward power of about 38 kW for WWVB to

> produce its effective radiated power of 50 kW."
>
> 73's
> Richard Clark, KB7QHC

The NIST folks could probably increase the efficiency to greater than 90% if they dug a large pit to temporarily store the decaying electrons. All of those dying electrons lying on the ground tend to discourage the active electrons from working as hard as they could.

The efficiency could be raised to nearly 100% if the two helices were wound in opposite directions. That would provide the best shot at equilibrium.

73,
Gene
W4SZ

2370. Shunt loads on T-lines in EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 19:55:38 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <%APQi.6418$oA2.1029@nlpi068.nbdc.sbc.com>
Source record: 35402

On my web page at: http://www.w5dxp.com/G5RV.HTM
I show how to install a 1000 pf capacitor across
the G5RV transmission line at the twinlead/coax
junction to improve the 75m SWR and move the
resonant point into the 75m phone band.

I have never been able to model the shunt capacitor
with EZNEC. Anyone know of a way to do that?
--
73, Cecil http://www.w5dxp.com

2371. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 20:02:59 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <1192478579.450246.218390@v23g2000prn.googlegroups.com>
Source record: 35403

On Oct 14, 12:34 pm, Frnak McKenney
<fr...@far.from.the.madding.crowd.com> wrote:
> Tim,
>
> Thanks for joining in.
>
>
>
>
>
>
>
> On Sat, 13 Oct 2007 17:27:01 -0700, Tim Shoppa <sho...@trailing-edge.com> wrote:
> > Frnak McKenney wrote:
> >> I'm in Richmond, Virginia and I'm trying to noticeably improve my
> >> reception of WWV's 10MHz signal from Fort Collins, Colorado. It all
> >> seemed so simple, two weeks ago: wind some wire, solder a
> >> connector, and Hey...presto! a clean WWV signal. <grin!>
> --snip--
>
> > Frank -
> > I am up in Maryland, not too far from you.
>
> > WWV on 10MHz is only usable for about a third or less of the day for
> > locking an electronic clock. Generally the late afternoons and
> > evenings are great, early afternoons and mornings are a little more
> > variable.
>
> > Overnight 5MHz works best. During the mid-day 15MHz or when
> > propogation permits 20MHz rules for WWV. I don't think your Heath has
> > any frequency diversity capability, right? Well, 10MHz is a pretty
> > good choice if you only have a choice of one, it is usually coming in
> > strong in the evenings there. Over wintertime 5MHz gets pretty good at
> > night.
>
> My current box, the MAC-II, only monitors 10MHz; its predecessor,
> the GC-1000 MAC, monitored (IIRC) 5/10/15MHz and chose the
> strongest.
>
> > You will, especially in the early morning, occasionally hear WWVH on
> > 10MHz or 5MHz or 15MHz. Sometimes I hear both WWV and WWVH at the same
> > time. You can recognize WWVH by the woman's voice reading the time.
>
> > My best antenna for 10MHz WWV is my 40-meter dipole strung between

> > two trees. Mine mostly points broadside to the NE/SW but if you could
> > arrange it, it would be slightly preferable to have it broadside to be
> > sensitive to the W.
>
> > A dipole optimized for 10MHz would be even shorter - the formulas
> > put a half wave dipole at 47 feet long.
>
> Thanks for your signal report and the antenna suggestion. I'll keep
> it in mind.
>
> On the other hand, my tuned (and currently horizontal) loop is
> suddenly picking up WWV/10MHz remarkably reliably, and I didn't even
> have to "sacrifice a goat at midnight"! <grin>
>
> Has your reception improved lately as well (last few days)?

Don't know about WWV in particular, but this past weekend on the ham bands there was an obvious uptick in propogation conditions. The MUF was up enough that I heard several pileups on 15 meters and 40 and 30 Meters were more hopping than usual in mid-day/early evening.

Tim.

2372. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 20:42:36 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3hj7h31vhbmm8upbhvnsfniomnnss7163v@4ax.com>
Source record: 35404

On Mon, 15 Oct 2007 19:48:48 GMT, Gene Fuller <W4SZzzzzzz@att.net>
wrote:

>> However, the combined efficiency of the two antennas
>> is about 65%. As a result, each transmitter only has to
>> produce a forward power of about 38 kW for WWVB to
>> produce its effective radiated power of 50 kW."
>
>The NIST folks could probably increase the efficiency to greater than
>90% if they dug a large pit to temporarily store the decaying electrons.
>All of those dying electrons lying on the ground tend to discourage the
>active electrons from working as hard as they could.
>
>The efficiency could be raised to nearly 100% if the two helices were
>wound in opposite directions. That would provide the best shot at
>equilibrium.

Hi Gene,

You shave points too close. They could achieve 130% efficiency if
they simply tapped into the current return on the inside of the wire.

Arthur's 3dB here and 3dB there, if you use enough wire, then you are
beginning to talk about GAIN!

Also, Fort Collins is a higher altitude than Podunk Illinois, so
impedance is less than 377 Ohms too! High gain, maybe 129% efficient.

***** irony mode off ********

Load resistance seen by the transmitters is roughly 0.85 Ohm
transformed to 50 Ohms.

73's
Richard Clark, KB7QHC

2373. Re: Shunt loads on T-lines in EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 21:31:38 UTC
From: jgboyles@aol.com
Message-ID: <1192483898.980629.60970@i38g2000prf.googlegroups.com>
Source record: 35405

On Oct 15, 2:55?pm, Cecil Moore <nos...@w5dxp.com> wrote:
> On my web page at:http://www.w5dxp.com/G5RV.HTM
> I show how to install a 1000 pf capacitor across
> the G5RV transmission line at the twinlead/coax
> junction to improve the 75m SWR and move the
> resonant point into the 75m phone band.
>
> I have never been able to model the shunt capacitor
> with EZNEC. Anyone know of a way to do that?
> --
> 73, Cecil http://www.w5dxp.com

Hi Cecil, Looking at your webpage, looks to me like a 103' dipole with 36-j324 impedance at 3.8 Mhz needs 28' of 450 ohm line instead of 300 ohm. 28' of 450 ohm line put you at 24+j25 with an swr of 2.7:1. 1000pf shunt cap. puts you near 1:1.

As for modeling the Shunt Capacitor, I have never done it, but you might try a stub to simulate the Xc. Don't have time at the moment, or I would give it a try.

73 Gary N4AST

2374. Re: Shunt loads on T-lines in EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 21:35:18 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <q2RQi.10865$4V6.837@newssvr14.news.prodigy.net>
Source record: 35406

jgboyles@aol.com wrote:
> Hi Cecil, Looking at your webpage, looks to me like a 103' dipole
> with 36-j324 impedance at 3.8 Mhz needs 28' of 450 ohm line instead of
> 300 ohm. 28' of 450 ohm line put you at 24+j25 with an swr of 2.7:1.
> 1000pf shunt cap. puts you near 1:1.

I wasn't trying for perfection, just improvement. I actually
tried it on my G5RV and got considerable improvement in reality.

> As for modeling the Shunt Capacitor, I have never done it, but you
> might try a stub to simulate the Xc. Don't have time at the moment,
> or I would give it a try.

That's a good idea, Gary, thanks for the suggestion.
--
73, Cecil http://www.w5dxp.com

2375. Re: Shunt loads on T-lines in EZNEC

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 23:07:01 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13h7skk6lqetd79@corp.supernews.com>
Source record: 35407

jgboyles@aol.com wrote:
>
> As for modeling the Shunt Capacitor, I have never done it, but you
> might try a stub to simulate the Xc. Don't have time at the moment,
> or I would give it a try.

With EZNEC v. 4.0 and earlier, the only way to model a shunt load other than a short stub was to make a small triangular or square loop and put the load on one leg and the parallel object on another leg. If the loop is too small, NEC will have trouble with it; if too large, its reactance will affect the result. Sometimes there's no suitable size.

Which is why I added the new parallel connected load feature to EZNEC v. 5.0. In that version, it's simple. The rightmost column in the Loads menu grid is "Ext Conn". Enter "P" or "Par" in that column, and the load will be connected in parallel with any other object on the same segment. See "Load, Parallel Connected" in the EZNEC v. 5.0 manual for more information.

Roy Lewallen, W7EL

2376. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 23:43:53 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ff0tvp$408$1@news.jpl.nasa.gov>
Source record: 35409

Richard Clark wrote:
> On Mon, 15 Oct 2007 09:06:49 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
> wrote:
>
>
>>>hear the tocks fairly clearly and even understand the voice. (Who
>>>knew the announcer's phrase for UTC "Coordinated Universal Time"?).
>>
>>UTC is not an acronym. It's a madeup identifier that matches neither
>>the English (Coordinated Universal Time) or the French (T U C.. I won't
>>even attempt to figure out what it is..).
>
>
> Hi All,
>
> In fact, UTC is an acronym (already anticipated by Frnak and
> explicitly stated every minute). It is but one of several, this one
> being rather genericized (because any longer would force a lot of
> talking, and minute passes by pretty quickly). The others would
> include: UTC(NIST), UT1; and the academic UT0, and UT2.

Au contraire...
while UT1, UT0, and UT2 are, in fact, acronyms of a sort, primarily
based on astronomical time, this is not the case for UTC..

the coordination has to do with matching up UT and TAI (atomic) time..
all those leap seconds, etc.

As one online source puts it:
The (Bureau Internationale de l'Heure) BIH was charged with the task of
monitoring and maintaining the program and introduced the term Temps
Universel Coordinnï¿½ or Coordinated Universal Time for the coordinated
time scale in 1964.

BIH is the predecessor of the current BIPM (who seem to have a problem
with the standard kilo losing mass) http://www.bipm.org/

or, for more information:
http://syrte.obspm.fr/journees2004/PDF/Arias2.pdf

which says: The name of Coordinated Universal Time UTC appeared in CCIR
documents in the early 60s.

One might also seek a paper from 1964, by Guinot. (who was a time guy at
the BIH back then)

A paper by Dennis McCarthy at USNO on "Evolution of Time Scales"
mentions in Section 6 that: the term "Coordinated Universal Time" was
introduced in the 1950s to designate a time scale in which the
adjustments to quartz crystal clocks were coordinated among
participating laboratories in the US and UK.

A more recent paper by Guinot says:
"Until 1965, the more or less common scale for emission of signals,
which had received spontaneously the name of Coordinated Universal Time
(UTC), had not been strictly defined."

>
> The reason for the initials order is that there is an hidden comma.
> Universal Time, Coordinated.

Funny, thing, though, that if one searches the literature of the time
for that particular sequence of words, it never occurs..

Given that Coordinated Universal Time existed well before UTC, I suspect
that the comma thing is a post hoc creation.

Wikipedia reports this as an erroneous
> expansion, but Wikipedia wasn't there in my Metrology classes (a
> couple dozen miles from NBS) where we worked with these NBS standards.
> It wasn't there when (1974) I performed the second leap second on my
> Cesium Beam Standard which was calibrated through WWVB (taking about
> half an hour, part of which was waiting during the roughly 15 minute
> intervals between TOCs). My antenna was so far away (on the fantail
> of the ship in another "time zone"), that I had to slip the time by
> 100nS.

2377. Alpha Delta DX-CC coils

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-15 23:53:44 UTC
From: NotMe <NotMe@Oops.edu>
Message-ID: <m_mdnUyH_tMaYI7anZ2dneKdnZydnZ2d@comcast.com>
Source record: 35408

Would it affect the performance of this antenna if I spray painted (LIGHTLY) the red coils? I'm try to "tone down" the redness and maybe lightly spray over the coils with a green or brownish color so as to make the coils less visible. I would cover the contacts and the ends, just lightly spray the coils.

Could spraying those coils lessen performance?

2378. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 00:30:55 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13h81htote5lf40@corp.supernews.com>
Source record: 35410

Jim Lux wrote:
> Richard Clark wrote:
>>
>> The reason for the initials order is that there is an hidden comma.
>> Universal Time, Coordinated.
>
> Funny, thing, though, that if one searches the literature of the time
> for that particular sequence of words, it never occurs..
>
> Given that Coordinated Universal Time existed well before UTC, I suspect
> that the comma thing is a post hoc creation.

Not everything is English, folks. UTC is for Universale Temps Coordinaire. No comma is implied or needed because in French, an adjective follows the word it modifies, with very few exceptions.

Roy Lewallen, W7EL

2379. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 00:55:28 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <if08h3tfnbkg4af6fde7hef4o8690vefft@4ax.com>
Source record: 35411

On Mon, 15 Oct 2007 16:43:53 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>> The reason for the initials order is that there is an hidden comma.
>> Universal Time, Coordinated.
>
>Funny, thing, though, that if one searches the literature of the time
>for that particular sequence of words, it never occurs..

You are writing to one who read the literature - at that time. My
experience is not from arm chair history 101. UTC was arrived at as a
compromise between the French (naturally) and the "rest of the world"
(what else?). My bona fides are documented too: two diplomas from the
only Metrology school in the United States - at that time. Time in
service: with training in calibration and maintenance of the HP Cesium
Beam standard, and VLF subsystem - at that time. I also lived through
the great switch-over from cycles to hertz, and GMT to Zulu - at that
time (or slightly before... I wasn't looking at the clock that day).

I can flood this page with 250 references that employ the strict usage
of "Universal Time Coordinated" "Universal Time, Coordinated" or
"Universal Time (Coordinated)" and specifically 35 of them printed
before 1967. With google it takes more time to cut and paste than
actually find them. A short list includes:

Title 15 1971 Code of Federal Regulations By United States Office of
the Federal Register (1971)
"... the Universal Time Coordinated (UTC)
system' as recommended by the Bureau
International de l'Heure (bill).
The carrier offset currently is minus 300 ..."

Meteorological and Geoastrophysical Abstracts By American
Meteorological Society (1960)

International Aerospace Abstracts
By American Institute of Aeronautics and Astronautics Technical
Information Service, United States National Aeronautics and Space
Administration, Institute of the Aerospace Sciences Technical
Information Service (1961)

Proceedings of the IEEE. By Institute of Electrical and Electronics
Engineers (1963)

Scientific and Technical Aerospace Reports
By United States. National Aeronautics and Space Administration.
Scientific and Technical Information Division, United States National

Aeronautics and Space Administration. Scientific and Technical Information Office, NASA Scientific and Technical Information Facility, United States National Aeronautics and Space Administration. Scientific and Technical Information Branch, NASA Center for AeroSpace Information, United States. National Aeronautics and Space Administration. Office of Scientific and Technical Information (1963)

Navigation Dictionary By United States Naval Oceanographic Office (1969)

New Scientist By EBSCO Publishing (1971)

Basic Electronic Instrument Handbook By Clyde F. Coombs (1972)

Newer titles:

UPI Style Book & Guide to Newswriting By Harold Martin, Bruce Cook

Dictionnaire des sciences et techniques du pï¿½trole By Magdeleine Moureau, Gerald Brace

Acronyms, Initialisms & Abbreviations Dictionary By Ellen T. Crowley

GPS Satellite Surveying By Alfred Leick

All of 10 minutes (give or take).

Familiar with any service acronyms like BFD?

73's
Richard Clark, KB7QHC

2380. Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 01:00:49 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99CAB742B368HuckleberryREMOVEbig@198.186.192.196>
Source record: 35412

Our ARES station has had a NVIS antenna on the roof of the building we are in. It is a large, one story structure with a rubber coated on steele roof.

The dual dipole type antenna, center at 14' and ends at about 3' high, was fed with a long run of coax and has historically exhibited a large SWR when operating below about 3825 KHz.

We recently replaced the entire antenna assy with a 122' half wave dipole, fed with 600 ohm ladder line to an SGC antenna coupler at the base of the center mast. Heights are the same as previous.

The SGC 237 coupler tunes the antenna well above 3825, and all other bands, too. However, we still exhibit a very high SWR when going below about 3825 and the tuner fails to tune... in fact the Radio's power drops way down, possibly preventing the tuner from working properly. A different radio shows the same problem.

QUESTION: Can anyone offer reasons we may be having this tuning problem below 3825?

Thanks.

Ed K7AAT

2381. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 03:21:52 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <9eOdnZSE74_Rs4nanZ2dnUVZ_remnZ2d@comcast.com>
Source record: 35413

"Ed G" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns99CAB742B368HuckleberryREMOVEbig@198.186.192.196...
>
>
> Our ARES station has had a NVIS antenna on the roof of the building
> we are in. It is a large, one story structure with a rubber coated on
> steele roof.
>
> The dual dipole type antenna, center at 14' and ends at about 3'
> high, was fed with a long run of coax and has historically exhibited a
> large SWR when operating below about 3825 KHz.
>
> We recently replaced the entire antenna assy with a 122' half wave
> dipole, fed with 600 ohm ladder line to an SGC antenna coupler at the
> base of the center mast. Heights are the same as previous.
>
> The SGC 237 coupler tunes the antenna well above 3825, and all other
> bands, too. However, we still exhibit a very high SWR when going below
> about 3825 and the tuner fails to tune... in fact the Radio's power drops
> way down, possibly preventing the tuner from working properly. A
> different radio shows the same problem.
>
>
> QUESTION: Can anyone offer reasons we may be having this tuning
> problem below 3825?
>
> Thanks.
>
>
> Ed K7AAT
>
I ran EZnec on it, and the impedance at resonance is about 5 Ohms (at about
3.8 MHz). Most of the energy goes straight up, which might not be bad for
local contacts. If you have your heart set on it, try a 9:1 balun at the
feedpont.

Tam/WB2TT

2382. calibration

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 04:48:21 UTC
From: ilu.arunkumarc@gmail.com
Message-ID: <1192510101.588615.257850@v23g2000prn.googlegroups.com>
Source record: 35414

Why calibration is required for VSWR meter...

2383. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 06:59:59 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <4714616d$0$9596$4c368faf@roadrunner.com>
Source record: 35415

"Ed G" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns99CAB742B368HuckleberryREMOVEbig@198.186.192.196...
>
>
> Our ARES station has had a NVIS antenna on the roof of the building
> we are in. It is a large, one story structure with a rubber coated on
> steele roof.
>
> The dual dipole type antenna, center at 14' and ends at about 3'
> high, was fed with a long run of coax and has historically exhibited a
> large SWR when operating below about 3825 KHz.
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> We recently replaced the entire antenna assy with a 122' half wave
> dipole, fed with 600 ohm ladder line to an SGC antenna coupler at the
> base of the center mast. Heights are the same as previous.
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> The SGC 237 coupler tunes the antenna well above 3825, and all other
> bands, too. However, we still exhibit a very high SWR when going below
> about 3825 and the tuner fails to tune... in fact the Radio's power drops
> way down, possibly preventing the tuner from working properly. A
> different radio shows the same problem.
>
>
> QUESTION: Can anyone offer reasons we may be having this tuning
> problem below 3825?
>
> Thanks.
>
>
> Ed K7AAT
>

Not surprising with a dipole located that close to a counterpoise. The
feedpoint impedance should be pretty low, I would guess 10 ohms or less.

Jimmie

2384. Re: Alpha Delta DX-CC coils

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 07:03:41 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <4714624b$0$24311$4c368faf@roadrunner.com>
Source record: 35416

"NotMe" <NotMe@Oops.edu> wrote in message
news:m_mdnUyH_tMaYI7anZ2dneKdnZydnZ2d@comcast.com...
> Would it affect the performance of this antenna if I spray painted
> (LIGHTLY) the red coils? I'm try to "tone down" the redness and maybe
> lightly spray over the coils with a green or brownish color so as to make
> the coils less visible. I would cover the contacts and the ends, just
> lightly spray the coils.
>
> Could spraying those coils lessen performance?
>
>
>

Depends on the paint, acrcylic enamel seems to be pretty much RF
transparent, no metalics.

2385. Re: calibration

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 10:36:25 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <F8mdnZznhemVCYna4p2dnAA@bt.com>
Source record: 35417

<ilu.arunkumarc@gmail.com> wrote in message
news:1192510101.588615.257850@v23g2000prn.googlegroups.com...
> Why calibration is required for VSWR meter...
>
The meter simply measures the ratio of the power travelling along a feeder line to an antenna against the reflected power back from the antenna and feeder due to a mismatch of impedence.

The VSWR meter does not strictly need to be calibrated. Simple meters tend to be frequency sensitive and are provided with a control to adjust the meter to read full scale for forward power. Operating a switch or reversing the connections allows reverse power to be assessed.

A VSWR meter will also only read accurately if the impedence of the antenna and feeder system is the same as the design impedence of the metrer, usually around 50 ohms.

More complex measurement circuitry and sensing devices can be used to compensate for frequency sensitivity and the meter calibrated against known loads in a factory. The important thing is to know how much reflected power is in the system because this power largely ends up being dissipated as heat in the transmitter final stages.

2386. Re: Foursquare arrays of 40M verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 11:16:33 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1192533393.378558.87200@k35g2000prh.googlegroups.com>
Source record: 35418

Let me second Richard's comments about radials needing to be some specific fraction of a wave - not....
Just put down the radials you can manage... If it isn't a perfect circle around the antenna, don't even think about it, put the radials down and enjoy your antenna..
Don't measure them, just pace them out from the antenna, cut and secure the end, step sideways, secure another end and pace back to the antenna, repeat... Whatever you get down will work...
Read, K3LR's comments about putting up a low 160 inverted L for an impromptu contest while on vacation, having just two 1/4W radials and working 40 some states and a bunch of countries...
So, assuming you can get down 20 or more radials under each vertical, the 4 square will work...
If you could get down lots more radials the 4 square will work a bit better on weak signals (strong signals won't notice how many radials you have down)
If you could get down 120 'full wave' radials, the 4 square will work the very best it can be (roughly 2 ohms series resistance on the ground circuit)...
But after 50 radials of random length, you will be hard pressed to tell any difference between that and the 120 radial 'perfect' ground plane...

cheers ...
denny/k8do

2387. Re: calibration

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 11:56:05 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <qF1Ri.4459$wF3.4294@nlpi061.nbdc.sbc.com>
Source record: 35419

ilu.arunkumarc@gmail.com wrote:
> Why calibration is required for VSWR meter...

Assume 100 watts in a 50 ohm transmission line
driving a 50 ohm load. The current in the line
is 1.414 amps and the voltage across the line
is 70.7 volts. That's also the current through
the load and the voltage across the load.

A typical SWR meter samples the current using
a toroidal transformer function resulting in a
sample voltage proportional to the *line current*
and equal in phase. Call this phasor voltage V(i).

The line voltage is sampled through a voltage
divider. The result is a sample voltage proportional
to the *line voltage* and equal in phase. Call this
phasor voltage V(v).

To obtain a voltage proportional to the reflected
power, the two sample voltages are subtracted, i.e.
added out of phase, so the total voltage,
V(t) = V(v) - V(i) = 0 for zero reflected power.

The only characteristic impedance and load for which
V(v) = V(i) is Z0=50 ohms. If one increases Z0,
V(v) will increase and V(i) will decrease and not
be equal in magnitude. If one decreases Z0, V(v)
will decrease and V(i) will increase and not be equal
in magnitude. Thus the SWR meter is calibrated to
50 ohms and only 50 ohms. If we switch to 75 ohm
coax and a 75 ohm load, the 50 ohm SWR meter will
indicate reflected power where none exists on the
Z0=75 ohm line.

(One can argue that the reflected power within the
50 ohm meter actually does exist inside the Z0=50
ohm meter environment but that is another discussion.)

An SWR meter is essentially a bridge with one leg
of the bridge typically set to 50 ohms. I have
designed SWR meters to read forward and reflected
power calibrated for Z0=300 ohms and 450 ohms. Those
meters are not useful when used with coax.

Continuing: To obtain a voltage proportional to the
forward power, the two sample voltages are added in

phase so the total voltage
V(t) = V(v) + V(i) = 2*V(v) = 2*V(i)
for the forward power indication in the example above.
A 100 watt calibration mark is written on the meter face
for that condition above.

If one goes through the exercise of the current being
out of phase with the voltage, one will observe that the
forward power and reflected power readings are accurate
as long as Vfor/Ifor = Vref/Iref = Z0 = 50 ohms.

V*I*cos(theta) = forward power - reflected power
--
73, Cecil http://www.w5dxp.com

2388. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 13:54:27 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <w4ydnd5diKwTX4nanZ2dnUVZ_vmlnZ2d@comcast.com>
Source record: 35420

"Jimmie D" <GFENDER@carolina.rr.com> wrote in message
news:4714616d$0$9596$4c368faf@roadrunner.com...
>
> "Ed G" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
> news:Xns99CAB742B368HuckleberryREMOVEbig@198.186.192.196...
>>
>>
>> Our ARES station has had a NVIS antenna on the roof of the building
>> we are in. It is a large, one story structure with a rubber coated on
>> steele roof.
>>
>> The dual dipole type antenna, center at 14' and ends at about 3'
>> high, was fed with a long run of coax and has historically exhibited a
>> large SWR when operating below about 3825 KHz.
>>
>> We recently replaced the entire antenna assy with a 122' half wave
>> dipole, fed with 600 ohm ladder line to an SGC antenna coupler at the
>> base of the center mast. Heights are the same as previous.
>>
>> The SGC 237 coupler tunes the antenna well above 3825, and all other
>> bands, too. However, we still exhibit a very high SWR when going below
>> about 3825 and the tuner fails to tune... in fact the Radio's power drops
>> way down, possibly preventing the tuner from working properly. A
>> different radio shows the same problem.
>>
>>
>> QUESTION: Can anyone offer reasons we may be having this tuning
>> problem below 3825?
>>
>> Thanks.
>>
>>
>> Ed K7AAT
>>
>
> Not surprising with a dipole located that close to a counterpoise. The
> feedpoint impedance should be pretty low, I would guess 10 ohms or less.
>
> Jimmie
>
It occurs to me a bandaid fix might be a 4:1 balun. Just hook it up
backwards; that is the 200 Ohm side to the tuner and the 50 Ohm side to the
antenna.

Tam/WB2TT

2389. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 15:10:01 UTC
From: Wimpie <wimtel@tetech.nl>
Message-ID: <1192547401.765749.6100@v29g2000prd.googlegroups.com>
Source record: 35421

On 16 oct, 03:00, Ed G <Huckleberry_REMO...@bigvalley.net> wrote:
> Our ARES station has had a NVIS antenna on the roof of the building
> we are in. It is a large, one story structure with a rubber coated on
> steele roof.
>
> The dual dipole type antenna, center at 14' and ends at about 3'
> high, was fed with a long run of coax and has historically exhibited a
> large SWR when operating below about 3825 KHz.
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> We recently replaced the entire antenna assy with a 122' half wave
> dipole, fed with 600 ohm ladder line to an SGC antenna coupler at the
> base of the center mast. Heights are the same as previous.
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> The SGC 237 coupler tunes the antenna well above 3825, and all other
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> about 3825 and the tuner fails to tune... in fact the Radio's power drops
> way down, possibly preventing the tuner from working properly. A
> different radio shows the same problem.
>
> QUESTION: Can anyone offer reasons we may be having this tuning
> problem below 3825?
>
> Thanks.
>
> Ed K7AAT

Hi Ed,

I assume that the metal roof extends over the full length of the
dipole.

Your antenne is very close to ground, that results (as mentioned by
other posters) in a very low radiation resistance (about 5..10 Ohms).
When using this construction at 40m, the impedance will be very High
(certainly above 6 kOhms, when losses are low).

I would recommend you to raise the antenna. This increases the
radiation resistance at 80m significantly. This lowers the impedance
at 40m also (making it easier for the tuner, resulting in higher
overall radiation efficiency).

When raising the antenna is not possible:
Construct the quarter wave sections of about 3 wires in parallel,
about 1m separated. Connect the wires at the feed point. This
"emulates" a thick strip dipole.

The result is that the radiation resistance at 80m does not change, but the input impedance at 40m reduces significantly (a factor 6 is possible). This enables the use of a transformer (for example 2(feed line) : 1(dipole side)). Now the 5..10 Ohms becomes 20..40 Ohms and the 6 kOhms will remain, or drops a little. As the impedance ratio has been reduced now, matching is easier. Please note that your transformer experiences high voltage (so high core flux) when operated on 40m.

Other option: use the transformer on 80m only, and remove it (relay) when operating on 40m.

I hope this helps a bit.

Best regards,

Wim
PA3DJS
www.tetech.nl

2390. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 15:39:46 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <4714db43$0$5009$4c368faf@roadrunner.com>
Source record: 35422

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
news:w4ydnd5diKwTX4nanZ2dnUVZ_vmlnZ2d@comcast.com...
>
> "Jimmie D" <GFENDER@carolina.rr.com> wrote in message
> news:4714616d$0$9596$4c368faf@roadrunner.com...
>>
>> "Ed G" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
>> news:Xns99CAB742B368HuckleberryREMOVEbig@198.186.192.196...
>>>
>>>
>>> Our ARES station has had a NVIS antenna on the roof of the building
>>> we are in. It is a large, one story structure with a rubber coated on
>>> steele roof.
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>>> The dual dipole type antenna, center at 14' and ends at about 3'
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>>> dipole, fed with 600 ohm ladder line to an SGC antenna coupler at the
>>> base of the center mast. Heights are the same as previous.
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>>> The SGC 237 coupler tunes the antenna well above 3825, and all other
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>>> about 3825 and the tuner fails to tune... in fact the Radio's power
>>> drops
>>> way down, possibly preventing the tuner from working properly. A
>>> different radio shows the same problem.
>>>
>>>
>>> QUESTION: Can anyone offer reasons we may be having this tuning
>>> problem below 3825?
>>>
>>> Thanks.
>>>
>>>
>>> Ed K7AAT
>>>
>>
>> Not surprising with a dipole located that close to a counterpoise. The
>> feedpoint impedance should be pretty low, I would guess 10 ohms or less.
>>
>> Jimmie
>>

> It occurs to me a bandaid fix might be a 4:1 balun. Just hook it up
> backwards; that is the 200 Ohm side to the tuner and the 50 Ohm side to
> the antenna.
>
> Tam/WB2TT
>

Ok, now I see your post where you modeled it. Something is weird here, I have to leave Outlook Express before it will update. Never used a BALUN like that. Maybe they could make a BALBAL. Is there such a thing??

Jimmie

2391. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 17:03:18 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ff2qsm$5nv$1@news.jpl.nasa.gov>
Source record: 35423

Richard Clark wrote:
> On Mon, 15 Oct 2007 16:43:53 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
> wrote:
>
>
>>>The reason for the initials order is that there is an hidden comma.
>>>Universal Time, Coordinated.
>>
>>Funny, thing, though, that if one searches the literature of the time
>>for that particular sequence of words, it never occurs..
>
>
> You are writing to one who read the literature - at that time. My
> experience is not from arm chair history 101. UTC was arrived at as a
> compromise between the French (naturally) and the "rest of the world"
> (what else?). My bona fides are documented too: two diplomas from the
> only Metrology school in the United States - at that time. Time in
> service: with training in calibration and maintenance of the HP Cesium
> Beam standard, and VLF subsystem - at that time. I also lived through
> the great switch-over from cycles to hertz, and GMT to Zulu - at that
> time (or slightly before... I wasn't looking at the clock that day).
>
> I can flood this page with 250 references that employ the strict usage
> of "Universal Time Coordinated" "Universal Time, Coordinated" or
> "Universal Time (Coordinated)" and specifically 35 of them printed
> before 1967. With google it takes more time to cut and paste than
> actually find them. A short list includes:

I defer to your googling skills..

I tried the search above, turned up nothing (other than obvious
derivative works like the wikipedia entry) in the first 10 pages of
hits, and took the references from BIH as definitive.

(I also tried WebOfScience, etc.)

I also didn't trust references from post, say, 1970, because by then,
you'd have seen definitions created by "back-formation" (i.e. finding
words that match the acronym.. which, when it comes right down to it, is
how lots of acronyms get created in the first place)

>

> Proceedings of the IEEE. By Institute of Electrical and Electronics
> Engineers (1963)

Looked for this one, and couldn't find it. Which month?
The oldest paper in Proceedings that has the term "universal time" in it is Hudson's paper in June 1967, p815 ff

It refers to CCIR recommendation 374.1 and CCIR reports 365 (in 1965) and 366 in connection with the discussion of UTC and SAT, but doesn't actually define UTC, nor does it provide a reference to a defining source. (other than a "in press" paper by Cord and Hudson, "Some trends in UT")

Smith's paper in the Proceedings in May 1972, seems to provide a fairly definitive history (page 481) citing the CCIR Study Group 7 Interim meeting in 1962 and CCIR Xth Plenary Assembly in 1963 (Vol III, p193), as well as an earlier recommendation of the IAU XIth General Assembly in 1961 ("Resolutions adopted by comm. 31" Trans IAU, Vol XI B(1961), p 329)

>
> Familiar with any service acronyms like BFD?

Sure.. but this is really a Tiny FD..

But, I really would like to find a definitive printed reference, as opposed to the recollections of folks present at the birth. Think of it as something akin to the citations in the OED. Once you have that golden reference, discussions like this one end in a hurry.

It's also because I'm casually interested in the obscure history of things like this. A co-worker asked the other day, "Why is wine in 750ml bottles, and when did it change from whatever they used before the metric system existed?"... turns out it's actually a fairly recent change. Another interesting discussion had to do with the use of "transfer standards" when building the pyramids in Egypt: failure to calibrate your working cubit against the standard within the calibration interval was punishable by death. No "For indication only, out of cal" stickers there, apparently. {I'm also looking for a definitive source for that story...presumably it would be in hieroglypics.. as one can imagine, though, there's a lot of very odd stuff out there when you bring up anything ancient Egypt related)

Jim, W6RMK

2392. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 19:43:23 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <ar2dnfKvoemuiYjanZ2dnUVZ8v2vnZ2d@pipex.net>
Source record: 35424

Never used a BALUN like that. Maybe they could make a BALBAL.

Is there such a thing??
==========
Balanced to balanced means an RF transformer with separate windings .
Preferably on a toroid ,otherwise on a ferrite bar (ex medium wave rx)

Frank GM0CSZ / KN6WH

2393. Re: Foursquare arrays of 40M verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 19:50:41 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192564241.113887.227780@t8g2000prg.googlegroups.com>
Source record: 35425

On 16 Oct, 04:16, Denny <k...@mailblocks.com> wrote:
> Let me second Richard's comments about radials needing to be some
> specific fraction of a wave - not....
> Just put down the radials you can manage... If it isn't a perfect
> circle around the antenna, don't even think about it, put the radials
> down and enjoy your antenna..
> Don't measure them, just pace them out from the antenna, cut and
> secure the end, step sideways, secure another end and pace back to the
> antenna, repeat... Whatever you get down will work...
> Read, K3LR's comments about putting up a low 160 inverted L for an
> impromptu contest while on vacation, having just two 1/4W radials and
> working 40 some states and a bunch of countries...
> So, assuming you can get down 20 or more radials under each vertical,
> the 4 square will work...
> If you could get down lots more radials the 4 square will work a bit
> better on weak signals (strong signals won't notice how many radials
> you have down)
> If you could get down 120 'full wave' radials, the 4 square will work
> the very best it can be (roughly 2 ohms series resistance on the
> ground circuit)...
> But after 50 radials of random length, you will be hard pressed to
> tell any difference between that and the 120 radial 'perfect' ground
> plane...
>
> cheers ...
> denny/k8do

Exactly! All you are doing is providing a low impedance
to ground so the return current gets back to transmitter ground
instead of the travelling up the outside of the coax.
Myths are really hard to put down
Art

2394. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 20:07:40 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <XdSdnfrhFsCah4janZ2dnUVZWhednZ2d@comcast.com>
Source record: 35426

"Jimmie D" <GFENDER@carolina.rr.com> wrote in message
news:4714db43$0$5009$4c368faf@roadrunner.com...
>
>
> Ok, now I see your post where you modeled it. Something is weird here, I
> have to leave Outlook Express before it will update. Never used a BALUN
> like that. Maybe they could make a BALBAL. Is there such a thing??
>
>
> Jimmie
I guess I should have called it a transformer. Although, it could be a
balun, like they use on output stages of RF amplifiers; 5.6 Ohm balanced to
50 Ohm unbalanced.

Tam

2395. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 20:20:10 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99CC40680E769nonenowhere@61.9.191.5>
Source record: 35427

Ed G <Huckleberry_REMOVE_@bigvalley.net> wrote in
news:Xns99CAB742B368HuckleberryREMOVEbig@198.186.192.196:

>
>
> Our ARES station has had a NVIS antenna on the roof of the
> building
> we are in. It is a large, one story structure with a rubber coated
> on steele roof.
>
> The dual dipole type antenna, center at 14' and ends at about 3'
> high, was fed with a long run of coax and has historically exhibited
> a large SWR when operating below about 3825 KHz.
>
> We recently replaced the entire antenna assy with a 122' half
> wave
> dipole, fed with 600 ohm ladder line to an SGC antenna coupler at the
> base of the center mast. Heights are the same as previous.
>
> The SGC 237 coupler tunes the antenna well above 3825, and all
> other
> bands, too. However, we still exhibit a very high SWR when going
> below about 3825 and the tuner fails to tune... in fact the Radio's
> power drops way down, possibly preventing the tuner from working
> properly. A different radio shows the same problem.
>
>
> QUESTION: Can anyone offer reasons we may be having this
> tuning
> problem below 3825?
>
> Thanks.
>
>
> Ed K7AAT
>

Ed,

The way in which you dealt with the transition from the open wire
feedline to the SGC237 unbalanced tuner is relevant. As is whether or not
you bonded the tuner 'ground' terminal to the roof.

Your description is short on relevant detail.

Owen

2396. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 20:39:26 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <47152176$0$19662$4c368faf@roadrunner.com>
Source record: 35428

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
news:XdSdnfrhFsCah4janZ2dnUVZWhednZ2d@comcast.com...
>
> "Jimmie D" <GFENDER@carolina.rr.com> wrote in message
> news:4714db43$0$5009$4c368faf@roadrunner.com...
>>
>>
>> Ok, now I see your post where you modeled it. Something is weird here, I
>> have to leave Outlook Express before it will update. Never used a BALUN
>> like that. Maybe they could make a BALBAL. Is there such a thing??
>>
>>
>> Jimmie
> I guess I should have called it a transformer. Although, it could be a
> balun, like they use on output stages of RF amplifiers; 5.6 Ohm balanced
> to 50 Ohm unbalanced.
>
> Tam
>

I know they are all transformers I was just wondering if there was a
specific name for a balanced to balanced transformer. I have just never
heard the term. I propably shouldnt make post in the wee hours of the
morning while under the influence of Flexeril and oxycodone either.

Jimmie

2397. Ferrite Chokes: What is the maximum impedance that can be obtained?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 21:02:21 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <1192568541.078033.195780@i38g2000prf.googlegroups.com>
Source record: 35429

The best way to ask my question is to use a thought experiment.

Imagine I have a bucket of ferrite rings. Assume that the permeability and other material properties of each ring is such that I get about 100 Ohms of resistive loss for one turn through a ring at 144 MHz.

Now assume I have 19" whip on top of a car connected to a 144 MHz transmitter. If I slip one ring over the whip and let it down to the bottom feedpoint, it will attenuate the signal by adding 100 Ohms in series with the feed of the antenna which otherwise would look like about 30 Ohms. That seems clear and seems to agree with common sense and observations.

Now if I stack up 20 ferrite rings on the antenna, if we analyze each ring as a lumped element we would have 2000 Ohms in series and essentially an open circuit and little current or power will flow.

However this does not pass the common sense test. Common sense says the ferrite tube will absorb the energy from the antenna and potentially will get hot and that the feedpoint Z of the antenna will NOT raise indefinitely with more and more ferrites but rather it seems it would level out to some value. We need to use distributed rather than lumped analysis.

Bottom line question... How to determine the feedpoint Z of a wire that is inside a ferrite tube?

thanks
Mark

2398. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 21:20:50 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99CC4AB17571Cnonenowhere@61.9.191.5>
Source record: 35430

Roy Lewallen <w7el@eznec.com> wrote in
news:13h81htote5lf40@corp.supernews.com:

> Not everything is English, folks. UTC is for Universale Temps
> Coordinaire. No comma is implied or needed because in French, an
> adjective follows the word it modifies, with very few exceptions.

Then wouldn't it be Temps Universale Coordinaire?

Owen

2399. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 21:41:57 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13hac15bu71dca4@corp.supernews.com>
Source record: 35431

On Sun, 14 Oct 2007 17:13:57 -0700, Roy Lewallen <w7el@eznec.com> wrote:
> Frnak McKenney wrote:
>>
>> Ah. So even if it starts out in vertically polarized in Fort
>> Collins 'way out thataway (he says, gesturing faintly west-ish)
>> WWV's signal might be polarized north-north-west by the time it gets
>> ro Richmond.
>
> Not exactly. The wave will still be nearly planar, that is, the
> orientation of the E field will be in a plane which is perpendicular to
> a line between you and the effective point in the ionosphere where the
> wave is coming from. But the E field can be rotated in any direction
> within that plane. So you want your antenna to have substantial gain in
> the direction of Fort Collins and at the elevation angle of the arriving
> signal (the latter will vary somewhat). But the polarization is a crap
> shoot.

So... I'd need a really crappy antenna? I think I have one around
here... <grin!>

Seriously, thanks for the description.

>> Hm. Wonder if anyone has built an antenna whose polarization shifts
>> to "best match" the incoming signal? (No, not _this_ weekend!
>> <grin>!)
>
> Sure, many. Polarization diversity is an old idea. In a previous life I
> worked on a phased array radar (cf.
> http://www.globalsecurity.org/space/systems/an-fps-85.htm). The
> transmitters have only horizontal dipole antennas so they transmit only
> a horizontally polarized signal. But each of the 4660 receivers has two
> dipole antennas, one vertical and one horizontal. This gives the
> receiver information about whether an object is tumbling or rotating,
> for example, by the way the polarization is shifted by the reflection.

Sounds like a really neat setup... on the other hand, it may be a
bit much for my poor MAC-II clock. <Grin!>

--snip premature self-back-patting--
>> How good? Well, I've unplugged the clock to reset it and it has
>> then received an "acceptable" WWV signal (it started showing digits)
>> eight times in the past two days.
--snip--

> Be cautious in generalizing about your accomplishments. Day-to-day
> propagation differences can be extreme. Unless you can do an immediate

> A-B comparison or take many, many measurements over a very long period
> of time, there's no way to distinguish between antenna and propagation
> changes.

Um. I just noticed.

Yesterday I powered the clock off and added a "line out" jack so I
could record the received audio. I got distracted here and there,
and when I put it all back together I couldn't get WWV to save my
life. I finally ripped out my wiring, assuming I'd inadvertently run
a wore too close to the RF stuff... but even _that_ didn't help.
I'm now concluding that I reacted too rapidly, that the WWV signal
had simply faded into the background noise.

Seems to be true today as well. I re-added my wiring, and the
signal was unchanged (still rotten: bits and pieces of WWV tones
fading and returning a random-appearing basis). I can now record
long segments of bits of WWV... plus much louder bits of other
shortwave activity and assorted noise sources.

Ah, well. It'll be back some day. <grin!>

>> I do a lot of reading in comp.dsp (sometimes it's fun just watching
>> the phrases fly back and forth <grin!>), and one common topic there
>> is the difference between "noise" and "signal". For me, "signal" is
>> "what I want", "noise" is "everything else", and the fun(?) part is
>> figuring out how to get as much of the former as I can while
>> downplaying or being able to ignore the effects of the latter.
--snip--
> The whole objective to receiving system design is to maximize the
> signal/noise ratio, where "noise" is "everything you don't want". Making
> both larger by the same amount accomplishes nothing you can't do with a
> simple amplifier.

Yup.

Heath's algorithm, or at least my interpretation of it based on its
behavior, is to require clear reception -- from start to end -- of
complete TOD "frames", and to only statr the display running when
they're reallyREALLYsure they're locked in.

I have a feeling that one could do a more "statistical" approach and
get better results on poor signals. For example, it appears that
the MAC-II requires that, to be acceptable, a BCD TOD "bit" has to
have its start and end within certain time boundaries. On the other
hand, one could capture whatever bits of 100Hz tone were around and
attempt, over time, to fit them into a pattern and see if it matched
a valid WWV frame. You'd have to take into account that the
contentsof the frame (the TOD) would be changing during your
accumulation, but I think it makes more sense to strip and squeeze
every useful bit of information one can get out of what one _does_
receive rather than waiting for life (or propagation) to be nearly
perfect.

But that's for _next_ month. <grin!>

Frank
--
"We are taught you must blame your father, your sisters, your
brothers, the school, the teachers -- you can blame anyone but
never blame yourself. It's never your fault. But it's always
your fault, because if you wanted to change, you're the one
who has got to change. It's as simple as that, isn't it?"
--Katherine Hepburn
--
Frank McKenney, McKenney Associates
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Munged E-mail: frank uscore mckenney ayut minds pring dawt cahm (y'all)

2400. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 21:43:04 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13hac38plk2jic0@corp.supernews.com>
Source record: 35432

On Sun, 14 Oct 2007 17:20:32 -0700, Roy Lewallen <w7el@eznec.com> wrote:
> Frnak McKenney wrote:
--snip--
>> Still, my current indoor loop seems to be picking up a nice strong
>> signal. It was upright when I first started testing, but it wound up
>> being laid flat at some point in the past few days -- about the time
>> I discovered that I had been mis-tuining it. Wonder which had more
>> effect: my changes, or atmospherics? <grin!>
>
> As I mentioned in my other recent posting, there's no way for you to tell.

I noticed. Yesterday all those really clear tones and voice
segments vanished while I wasn't paying attention. I can still hear
enough WWV on occasion to know it's still there, but it's not even
close to being strong enough to start the clock running.

>> Anyway, thank you for your time and suggestions. I did some looking
>> around on the 'web for introductory material to help me understand
>> the ARRL Antenna Handbook and stumbled onto these:
>>
>> Antenna Newcomers and the Language of Antennas
>> http://www.cebik.com/tales/nc.html
>>
>> Antennas from the Ground Up
>> http://www.cebik.com/gup/groundup.html
>>
>> Some really nice propagation plots. Now, if there were just some
>> simple way of figuring out which way the antenna is oriented
>> relative to the plots... "It's an imperfect universe" <grin!>
>
> You can duplicate the plots for the kinds of simple antennas you're
> dealing with, with the free demo version of EZNEC available from
> http://eznec.com. In the View Antenna display, select View/Objects, then
> check the "2D Display" box. Then you'll see a 2D plot superimposed on
> the view of the antenna, to show how the two are related. When viewing a
> 3D plot, the View Antenna display rotates along with the 3D pattern, so
> you can see how they're related if you keep both windows open.

Thanks for the pointer; I didn't knwo that there was a free version
available. I'll check it out when I get a chance

Frank
--
"Don't be afraid to take a big step if one is indicated.
You can't cross a chasm in two small jumps."

-- David Lloyd George, British Statesman
--
Frank McKenney, McKenney Associates
Richmond, Virginia / (804) 320-4887
Munged E-mail: frank uscore mckenney ayut minds pring dawt cahm (y'all)

2401. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 21:44:12 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13hac5c9r45a0de@corp.supernews.com>
Source record: 35433

On Mon, 15 Oct 2007 09:06:49 -0700, Jim Lux <james.p.lux@jpl.nasa.gov> wrote:
> Frnak McKenney wrote:

>> Hm. Wonder if anyone has built an antenna whose polarization shifts
>> to "best match" the incoming signal? (No, not _this_ weekend!
>> <grin>!)
>
> Yes, such things have been built. There are some French researchers who
> built an adaptive combiner that combined multiple polarizations, and
> also did the processing to allow using both the ordinary and
> extraordinary ray, and substantially improved link reliability on 1000km
> skywave paths.

Neat!

>> A minor update: It seems that I was _mis_tuning my antenna,
>> adjusting it for the strongest signal (highest stack of LEDs lit).
>> Over the past two days either I've finally tuned it _correctly_ or
>> I've done that _and_ the signal has improved. Whatever the
>> cause(s), I can now -- at times, in fact for an hour at a time --
>> hear the tocks fairly clearly and even understand the voice. (Who
>> knew the announcer's phrase for UTC "Coordinated Universal Time"?).
>
> UTC is not an acronym. It's a madeup identifier that matches neither
> the English (Coordinated Universal Time) or the French (T U C.. I won't
> even attempt to figure out what it is..).

Thanks for the background. Mostly, I was just impressed to hear
any recognizable voice coming out of the MAC-II's speaker after
all this time; the announcer could have said "Washington Standard
Time" and I'd have been impressed. <grin!>

> These sorts of international metrology things have all sorts of such
> negotiated compromises in them, stemming all the way back to the Prime
> Meridian being in Greenwich, but measuring in meters.

Um. That would be in... "chrono" meters, right? <grin!>

Frank
--
I find the great thing in this world is not so much where we
stand, as in what direction we are moving: To reach the port of
heaven, we must sail sometimes with the wind and sometimes against
it, -- but we must sail, and not drift, nor lie at anchor.
-- Oliver Wendell Holmes
--

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2402. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 21:46:14 UTC
From: Frnak McKenney <frnak@far.from.the.madding.crowd.com>
Message-ID: <13hac96kopms714@corp.supernews.com>
Source record: 35434

On Mon, 15 Oct 2007 13:02:59 -0700, Tim Shoppa <shoppa@trailing-edge.com> wrote:
> On Oct 14, 12:34 pm, Frnak McKenney
><fr...@far.from.the.madding.crowd.com> wrote:
>> On Sat, 13 Oct 2007 17:27:01 -0700, Tim Shoppa <sho...@trailing-edge.com> wrote:
>> > Frnak McKenney wrote:
>> >> I'm in Richmond, Virginia and I'm trying to noticeably improve my
>> >> reception of WWV's 10MHz signal from Fort Collins, Colorado. It all
>> >> seemed so simple, two weeks ago: wind some wire, solder a
>> >> connector, and Hey...presto! a clean WWV signal. <grin!>
>> --snip--

>> Thanks for your signal report and the antenna suggestion. I'll keep
>> it in mind.
>>
>> On the other hand, my tuned (and currently horizontal) loop is
>> suddenly picking up WWV/10MHz remarkably reliably, and I didn't even
>> have to "sacrifice a goat at midnight"! <grin>
>>
>> Has your reception improved lately as well (last few days)?
>
> Don't know about WWV in particular, but this past weekend on the ham
> bands there was an obvious uptick in propogation conditions. The MUF
> was up enough that I heard several pileups on 15 meters and 40 and 30
> Meters were more hopping than usual in mid-day/early evening.

Well, I hope it continued for everyone else, but for me the WWV
signal has faded back into obscurity. I can occasionally hear
small, dim fragments of its former glory, and that for only 10-20
seconds at a time.

I guess I really should have sacrificed that goat. <grin?>

Frank
--
"...each new generation born is in effect an invasion of
civilization by little barbarians, who must be civilized
before it is too late." -- Thomas Sowell
--
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2403. Plotting antenna pattern from Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 22:10:18 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99CC53146C10Fnonenowhere@61.9.191.5>
Source record: 35435

For those interested in confirming beamwidth of a large aperture dish at microwave frequencies, the following article describes a method using Sun noise as a measurement source:
http://www.vk1od.net/nfm/applications/AntennaPatternFromSun.htm .

Owen

2404. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 22:21:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13haeao516rmj66@corp.supernews.com>
Source record: 35436

Highland Ham wrote:
> Never used a BALUN like that. Maybe they could make a BALBAL.
>
> Is there such a thing??
> ==========
> Balanced to balanced means an RF transformer with separate windings .
> Preferably on a toroid ,otherwise on a ferrite bar (ex medium wave rx)

If you take a regular transformer and connect it between a "balanced" (symmetrical) system and "unbalanced" (asymmetrical) system, is it a BALUN? Then does it change to an UNUN if both sides are asymmetrical and a BALBAL if both are symmetrical? What does a BALBAL or UNUN do? What does a BALUN do?

Roy Lewallen, W7EL

2405. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 22:26:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13haekdpipcr1ec@corp.supernews.com>
Source record: 35437

Owen Duffy wrote:
> Roy Lewallen <w7el@eznec.com> wrote in
> news:13h81htote5lf40@corp.supernews.com:
>
>> Not everything is English, folks. UTC is for Universale Temps
>> Coordinaire. No comma is implied or needed because in French, an
>> adjective follows the word it modifies, with very few exceptions.
>
> Then wouldn't it be Temps Universale Coordinaire?

Good point. This should be reported to the French language police!

Roy Lewallen, W7EL

2406. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 22:28:39 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13haeom330qll27@corp.supernews.com>
Source record: 35438

Frnak McKenney wrote:
> . . .
> I guess I really should have sacrificed that goat. <grin?>

Hey, it looks like you're figuring out some of the secret techniques of improving radio propagation!

Roy Lewallen, W7EL

2407. Re: Ferrite Chokes: What is the maximum impedance that can be obtained?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 22:40:26 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13hafepmts0urb4@corp.supernews.com>
Source record: 35439

Mark wrote:
> The best way to ask my question is to use a thought experiment.
>
> Imagine I have a bucket of ferrite rings. Assume that the permeability
> and other material properties of each ring is such that I get about
> 100 Ohms of resistive loss for one turn through a ring at 144 MHz.
>
> Now assume I have 19" whip on top of a car connected to a 144 MHz
> transmitter. If I slip one ring over the whip and let it down to the
> bottom feedpoint, it will attenuate the signal by adding 100 Ohms in
> series with the feed of the antenna which otherwise would look like
> about 30 Ohms. That seems clear and seems to agree with common sense
> and observations.
>
>
> Now if I stack up 20 ferrite rings on the antenna, if we analyze each
> ring as a lumped element we would have 2000 Ohms in series and
> essentially an open circuit and little current or power will flow.
>
> However this does not pass the common sense test. Common sense says
> the ferrite tube will absorb the energy from the antenna and
> potentially will get hot and that the feedpoint Z of the antenna will
> NOT raise indefinitely with more and more ferrites but rather it seems
> it would level out to some value. We need to use distributed rather
> than lumped analysis.

Yes. The effect of a ferrite ring part way up the antenna won't be the same as one at the base. A 100 ohm resistor in the center of the vertical will add 50 ohms at the feedpoint. One 3/4 of the way to the top will add about 17.5 ohms.

Regarding the ferrite absorbing energy from the antenna -- the amount absorbed will be maximum when the ferrite's impedance is the complex conjugate of the antenna's. For example, if the vertical is resonant and grounded with no feed system, you'll get maximum ferrite heating when the ferrite's impedance is around 36 + j0 ohms. If you add more ferrite, the amount of power absorbed from a passing wave and delivered to the ferrite will decrease, approaching zero as the ferrite impedance increases to a large value.

> Bottom line question... How to determine the feedpoint Z of a wire
> that is inside a ferrite tube?

You could probably do a pretty decent job with an antenna modeling program, placing a number of lumped loads along the wire.

Roy Lewallen, W7EL

2408. Re: Ferrite Chokes: What is the maximum impedance that can be obtained?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 23:40:58 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1192578058.132935.217610@e9g2000prf.googlegroups.com>
Source record: 35440

On Oct 16, 3:40 pm, Roy Lewallen <w...@eznec.com> wrote:
...
> Regarding the ferrite absorbing energy from the antenna -- the amount
> absorbed will be maximum when the ferrite's impedance is the complex
> conjugate of the antenna's. For example, if the vertical is resonant and
> grounded with no feed system, you'll get maximum ferrite heating when
> the ferrite's impedance is around 36 + j0 ohms. If you add more ferrite,
> the amount of power absorbed from a passing wave and delivered to the
> ferrite will decrease, approaching zero as the ferrite impedance
> increases to a large value.
...

I'm puzzling over this, Roy. It seems like this assumes some source impedance driving the antenna, but maybe I'm missing something in your analysis.

My thought-process is to treat the antenna as an impedance Z1, the ferrite an impedance Z2, and the source an impedance Z3, the three of them being in series. I suppose thinking of the antenna as a constant impedance as you change its environment with ferrite might not be quite right, but to the degree that approximation is correct, then I'd expect maximum ferrite dissipation (absorption) would occur when its impedance, Z2 is equal to the complex conjugate of (Z1+Z3). On the other hand, if I feed the antenna with a constant current source, the ferrite dissipation increases indefinitely as the resistive component of its impedance increases.

Am I missing something?

Cheers,
Tom

2409. Re: Plotting antenna pattern from Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 23:44:34 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <47154ce0$0$24277$4c368faf@roadrunner.com>
Source record: 35341

"Owen Duffy" <none@no.where> wrote in message
news:Xns99CC53146C10Fnonenowhere@61.9.191.5...
> For those interested in confirming beamwidth of a large aperture dish at
> microwave frequencies, the following article describes a method using Sun
> noise as a measurement source:
> http://www.vk1od.net/nfm/applications/AntennaPatternFromSun.htm .
>
> Owen

Radar antennas ar also checked in this manner. Data about where the sun will rise on the horizon is known so it is realativly easy to determine how accurate the radar's azimuth alignment. This used to be a real pain requiring a facility shutdown to acomplish the task. Now there is a PC based device that connects to the Azimuth Change Pulse, Azimuth Reference Pulse, and video ouputs. Not only is the boresight azimuth of the antenna verified but also the shape of the pattern with the radar online. Data recorded is also used to verify positioning of permanent echos. The device works on both 2D and 3D radars.

Jimmie

2410. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-16 23:45:30 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99CBAA7A54182HuckleberryREMOVEbig@64.209.0.89>
Source record: 35342

> Ed,
>
> The way in which you dealt with the transition from the open wire
> feedline to the SGC237 unbalanced tuner is relevant. As is whether or
> not you bonded the tuner 'ground' terminal to the roof.
>
> Your description is short on relevant detail.
>
> Owen
>

SG237 tuner is not "bonded" to the roof ground, SGC does not suggest doing such a thing, and in this case, it would not be possible anyway since the "ground" side of the tuner is also one side of the balanced antenna feedpoint. The SG237 is feeding about 14' of 600 ohm open ladder line, spaced about 1 foot off the aluminum mast, up to the feedpoint of the antenna, a 75M dipole (61' per leg). The tuner is sitting in a plastic box, about 1 foot off the roof.

Ed

2411. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 00:12:04 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <47155352$0$20569$4c368faf@roadrunner.com>
Source record: 35343

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:13haeao516rmj66@corp.supernews.com...
> Highland Ham wrote:
>> Never used a BALUN like that. Maybe they could make a BALBAL.
>>
>> Is there such a thing??
>> ==========
>> Balanced to balanced means an RF transformer with separate windings .
>> Preferably on a toroid ,otherwise on a ferrite bar (ex medium wave rx)
>
> If you take a regular transformer and connect it between a "balanced"
> (symmetrical) system and "unbalanced" (asymmetrical) system, is it a
> BALUN? Then does it change to an UNUN if both sides are asymmetrical and a
> BALBAL if both are symmetrical? What does a BALBAL or UNUN do? What does a
> BALUN do?
>
> Roy Lewallen, W7EL

Whether a transformer works balanced to balanced, unbalanced to unbalanced
or balanced to unbalanced is determined by ground reference. The transformer
just steps up/steps down voltage and current just like a power supply
transformer. Like it doesnt matter whether a power supply transformer is
connect to a balanced main or one side is grounded or whether the output has
a grounded side or not neither does it matter to an RF transformer.

Jimmie

2412. Re: Ferrite Chokes: What is the maximum impedance that can be obtained?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 00:19:44 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13hal8vst4gfpad@corp.supernews.com>
Source record: 35344

Thanks for the comments. Once again, I scanned a posting too hastily, and somehow missed the "transmitter" part. My comments were appropriate for a receiving antenna, not transmitting. So let me try to answer both Tom's and Mark's postings more appropriately.

None of us has a constant current source with which to drive an antenna, but generally a source with a fixed amount of power and a finite source impedance. If we did have a constant current source, then yes, adding more and more ferrite cores would result in more and more power being delivered by the source, a larger and larger fraction of which would be dissipated in the ferrite. A 1 megohm resistor would get a bundle of power from our source, and a 10 megohm resistor would get 10 times as much.

If we have a tuner, we can adjust our source impedance over some range. Provided that the feedpoint impedance is within that range with the ferrites in place, we can deliver all our power to the ferrite-antenna combination. I believe that the fraction of the power applied to the antenna which ends up in the ferrites monotonically increases as we add ferrites (assuming we don't move the previously added ones). If the ferrites were all at the base, the equivalent load circuit would be just two impedances in series -- the ferrite impedance and the antenna feedpoint impedance, and it would behave as Tom said. But putting the ferrite cores anywhere but the base changes the antenna current distribution, which has a potentially complex effect on the feedpoint impedance other than just adding the transformed impedance of the core. This means that not only does Tom's Z3 increase as we add ferrites, but Z1 changes also.

Roy Lewallen, W7EL

K7ITM wrote:
> On Oct 16, 3:40 pm, Roy Lewallen <w...@eznec.com> wrote:
> ...
>> Regarding the ferrite absorbing energy from the antenna -- the amount
>> absorbed will be maximum when the ferrite's impedance is the complex
>> conjugate of the antenna's. For example, if the vertical is resonant and
>> grounded with no feed system, you'll get maximum ferrite heating when
>> the ferrite's impedance is around 36 + j0 ohms. If you add more ferrite,
>> the amount of power absorbed from a passing wave and delivered to the
>> ferrite will decrease, approaching zero as the ferrite impedance
>> increases to a large value.
> ...
>
> I'm puzzling over this, Roy. It seems like this assumes some source
> impedance driving the antenna, but maybe I'm missing something in your

> analysis.
>
> My thought-process is to treat the antenna as an impedance Z1, the
> ferrite an impedance Z2, and the source an impedance Z3, the three of
> them being in series. I suppose thinking of the antenna as a constant
> impedance as you change its environment with ferrite might not be
> quite right, but to the degree that approximation is correct, then I'd
> expect maximum ferrite dissipation (absorption) would occur when its
> impedance, Z2 is equal to the complex conjugate of (Z1+Z3). On the
> other hand, if I feed the antenna with a constant current source, the
> ferrite dissipation increases indefinitely as the resistive component
> of its impedance increases.
>
> Am I missing something?
>
> Cheers,
> Tom
>

2413. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 00:27:02 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <maqdnRRoOOtNy4janZ2dnUVZ_oesnZ2d@comcast.com>
Source record: 35345

"Ed G" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns99CBAA7A54182HuckleberryREMOVEbig@64.209.0.89...
>
>> Ed,
>>
>> The way in which you dealt with the transition from the open wire
>> feedline to the SGC237 unbalanced tuner is relevant. As is whether or
>> not you bonded the tuner 'ground' terminal to the roof.
>>
>> Your description is short on relevant detail.
>>
>> Owen
>>
>
>
> SG237 tuner is not "bonded" to the roof ground, SGC does not suggest
> doing such a thing, and in this case, it would not be possible anyway
> since the "ground" side of the tuner is also one side of the balanced
> antenna feedpoint. The SG237 is feeding about 14' of 600 ohm open
> ladder line, spaced about 1 foot off the aluminum mast, up to the
> feedpoint of the antenna, a 75M dipole (61' per leg). The tuner is
> sitting in a plastic box, about 1 foot off the roof.
>
> Ed

If I had a huge metal roof like that, I would be tempted to try one of the shortened verticals. The kind that requires radials - which would be your roof.

You are running coax from the tuner to the shack, right; with just the 14 feet of ladder line?

Tam/WB2TT

2414. Re: Equilibrium

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 00:27:11 UTC
From: Yuri Blanarovich <K3BU@optonline.net>
Message-ID: <XFcRi.171$l96.99@newsfe12.lga>
Source record: 35346

"Walter Maxwell" <walt@w2du.com> wrote in message > I'm enjoying every minute of your entertainment presentations, and I'd miss them dearly if you left the
> thread. But your talents would be much more appreciated if your writings
> were to be presented to the national
> TV audiences, on whichever channel you choose to present yer work.
>
> Sincerely yers,
>
> Walt, W2DU

"Small" problem, Artsist is patenting his "jokes". I dare to predict that if he was to write real humor, he would screw it just like his antenna "creations".

IMHO, Yuri

2415. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 01:17:47 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <gcoah3d4sujs2fj0hbmuaon1q8forshr79@4ax.com>
Source record: 35347

On Tue, 16 Oct 2007 20:27:02 -0400, "Tam/WB2TT"
<t-tammaru@c0mca$t.net> wrote:

>
>"Ed G" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
>news:Xns99CBAA7A54182HuckleberryREMOVEbig@64.209.0.89...
>>
>>> Ed,
>>>
>>> The way in which you dealt with the transition from the open wire
>>> feedline to the SGC237 unbalanced tuner is relevant. As is whether or
>>> not you bonded the tuner 'ground' terminal to the roof.
>>>
>>> Your description is short on relevant detail.
>>>
>>> Owen
>>>
>>
>>
>> SG237 tuner is not "bonded" to the roof ground, SGC does not suggest
>> doing such a thing, and in this case, it would not be possible anyway
>> since the "ground" side of the tuner is also one side of the balanced
>> antenna feedpoint. The SG237 is feeding about 14' of 600 ohm open
>> ladder line,

Is the 237 designed for balanced antennas or single random wires, or
either?

bob
k5qwg

>spaced about 1 foot off the aluminum mast, up to the
>> feedpoint of the antenna, a 75M dipole (61' per leg). The tuner is
>> sitting in a plastic box, about 1 foot off the roof.
>>
>> Ed
>
>If I had a huge metal roof like that, I would be tempted to try one of the
>shortened verticals. The kind that requires radials - which would be your
>roof.
>
>You are running coax from the tuner to the shack, right; with just the 14
>feet of ladder line?
>
>Tam/WB2TT

>

2416. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 01:29:50 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <4715658c$0$20655$4c368faf@roadrunner.com>
Source record: 35348

"Ed G" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns99CAB742B368HuckleberryREMOVEbig@198.186.192.196...
>
>
> Our ARES station has had a NVIS antenna on the roof of the building
> we are in. It is a large, one story structure with a rubber coated on
> steele roof.
>
> The dual dipole type antenna, center at 14' and ends at about 3'
> high, was fed with a long run of coax and has historically exhibited a
> large SWR when operating below about 3825 KHz.
>
> We recently replaced the entire antenna assy with a 122' half wave
> dipole, fed with 600 ohm ladder line to an SGC antenna coupler at the
> base of the center mast. Heights are the same as previous.
>
> The SGC 237 coupler tunes the antenna well above 3825, and all other
> bands, too. However, we still exhibit a very high SWR when going below
> about 3825 and the tuner fails to tune... in fact the Radio's power drops
> way down, possibly preventing the tuner from working properly. A
> different radio shows the same problem.
>
>
> QUESTION: Can anyone offer reasons we may be having this tuning
> problem below 3825?
>
> Thanks.
>
>
> Ed K7AAT
>

One of the things I learned while having to set up an antenna using an auto tuner is that they seem to work best on random lengths of wire. I define random length as any length that is not close to being resonat on any frequency you will ever be using. After expeimenting with several tuned dipoles we gave up and used a 33ft fiberglass vertical whip that tuned well on all bands. I would like to hear whether or not others have had similar experiences.

Jimmie

2417. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 02:12:04 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13harrjebe7gjc5@corp.supernews.com>
Source record: 35349

Tam/WB2TT wrote:
>
> If I had a huge metal roof like that, I would be tempted to try one of the
> shortened verticals. The kind that requires radials - which would be your
> roof.

Unfortunately, a vertical makes a poor NVIS antenna.

> . . .

Roy Lewallen, W7EL

2418. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 02:17:19 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <m1sah3pevc4mo60ccoepj1u91ds5c1nlc1@4ax.com>
Source record: 35350

On Tue, 16 Oct 2007 16:07:40 -0400, "Tam/WB2TT"
<t-tammaru@c0mca$t.net> wrote:

>I guess I should have called it a transformer. Although, it could be a
>balun, like they use on output stages of RF amplifiers; 5.6 Ohm balanced to
>50 Ohm unbalanced.

Hi Tam,

Lift one wire from ground and you've got that BalBal.

73's
Richard Clark, KB7QHC

2419. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 02:24:18 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99CC7E24E6D83nonenowhere@61.9.191.5>
Source record: 35351

Roy Lewallen <w7el@eznec.com> wrote in
news:13haekdpipcr1ec@corp.supernews.com:

> Owen Duffy wrote:
>> Roy Lewallen <w7el@eznec.com> wrote in
>> news:13h81htote5lf40@corp.supernews.com:
>>
>>> Not everything is English, folks. UTC is for Universale Temps
>>> Coordinaire. No comma is implied or needed because in French, an
>>> adjective follows the word it modifies, with very few exceptions.
>>
>> Then wouldn't it be Temps Universale Coordinaire?
>
> Good point. This should be reported to the French language police!
>
> Roy Lewallen, W7EL
>

Roy, I think that as others have posted, it is neither English nor French, but a bastardisation that doesn't concede either language to be the better for expressing the meaning. The diplomacy aspect of striking standards no doubt!

Owen

2420. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 03:07:31 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99CC8578547CBnonenowhere@61.9.191.5>
Source record: 35352

Ed G <Huckleberry_REMOVE_@bigvalley.net> wrote in
news:Xns99CBAA7A54182HuckleberryREMOVEbig@64.209.0.89:

>
>> Ed,
>>
>> The way in which you dealt with the transition from the open wire
>> feedline to the SGC237 unbalanced tuner is relevant. As is whether or
>> not you bonded the tuner 'ground' terminal to the roof.
>>
>> Your description is short on relevant detail.
>>
>> Owen
>>
>
>
> SG237 tuner is not "bonded" to the roof ground, SGC does not
suggest
> doing such a thing, and in this case, it would not be possible anyway
> since the "ground" side of the tuner is also one side of the balanced
> antenna feedpoint. The SG237 is feeding about 14' of 600 ohm open
> ladder line, spaced about 1 foot off the aluminum mast, up to the
> feedpoint of the antenna, a 75M dipole (61' per leg). The tuner is
> sitting in a plastic box, about 1 foot off the roof.
>
> Ed

The feedline is doing more than transporting energy to the dipole centre,
it almost certainly carries a significant common mode current and in that
case is just as much a part of the radiating system as the dipole itself.

So, isn't the coax and control line to the SG237 carrying current mode RF
current, ie contibuting to radiation.

Inch by inch, the detail unfolds.

Owen

2421. Re: Plotting antenna pattern from Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 03:32:11 UTC
From: Dale Parfitt <parinc@verizon.net>
Message-ID: <%mfRi.4787$GR1.4045@trnddc08>
Source record: 35353

"Owen Duffy" <none@no.where> wrote in message
news:Xns99CC53146C10Fnonenowhere@61.9.191.5...
> For those interested in confirming beamwidth of a large aperture dish at
> microwave frequencies, the following article describes a method using Sun
> noise as a measurement source:
> http://www.vk1od.net/nfm/applications/AntennaPatternFromSun.htm .
>
> Owen

Hi Owen,
I have done this to plot the pattern of my 1296 14' EME dish- using both a GR1236 meter and more recently with an SDR-IQ receiver on the output of my transverter.

Dale W4OP

2422. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 04:38:17 UTC
From: Bill D <billbvr@mchsi.com>
Message-ID: <ZkgRi.141104$Xa3.37833@attbi_s22>
Source record: 35354

"Ed G" <Huckleberry_> large SWR when operating below about 3825 KHz.
>
> We recently replaced the entire antenna assy with a 122' half wave
> dipole, fed with 600 ohm ladder line to an SGC antenna coupler at the
> base of the center mast. > The SGC 237 coupler tunes the antenna
> well above 3825, and all other bands, too. However, we still exhibit a
> very high SWR when going below about 3825 and the tuner fails to tune...
> in fact the Radio's power drops
> way down, possibly preventing the tuner from working properly. A
> different radio shows the same problem.

Ed, sounds like your radios are into VSWR turndown from the inability of the tuner to match at the low end. It could be that the Z at 3825 is going high which a lot of tuners can't handle--or could be very low, same problem, no match. Try adding some more length to the dipole if you can and see if it tunes better at the low end. Even if you only drape pieces down at the ends would help if you can't extend more horizontally.
73,Bill W0BVR

2423. Re: Plotting antenna pattern from Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 06:49:05 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99CCAB0948820nonenowhere@61.9.191.5>
Source record: 35355

"Dale Parfitt" <parinc@verizon.net> wrote in
news:%mfRi.4787$GR1.4045@trnddc08:

> Hi Owen,
> I have done this to plot the pattern of my 1296 14' EME dish- using
> both a GR1236 meter and more recently with an SDR-IQ receiver on the
> output of my transverter.

Hi Dale,

Interesting.

I should have noted in the article that Rex's measurements were made with an ordinary SSB transceiver (behind a transverter), the same receiver that is used for normal QSOs.

Owen

2424. Re: calibration

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 11:26:22 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1192620382.509629.159200@e34g2000pro.googlegroups.com>
Source record: 35356

> --
> 73, Cecil http://www.w5dxp.com

Who's this Theta broad you keep bringing up?

2425. Re: calibration

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 12:53:39 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <pBnRi.6644$oA2.215@nlpi068.nbdc.sbc.com>
Source record: 35357

Denny wrote:
> Who's this Theta broad you keep bringing up?

In power engineering, the Greek letter, Theta,
is usually used to denote the phase angle between
the voltage and the current. V*I*cos(theta) are
the watts, i.e. real power. V*I*sin(theta) are
the vars, i.e. reactive volt-amps.
--
73, Cecil http://www.w5dxp.com

2426. Help identify 3 ele beam

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 13:45:19 UTC
From: radiomuseum@msn.com
Message-ID: <5543-471611EF-3635@baytvnwsxa002.msntv.msn.com>
Source record: 35358

I bought a 3 element trap yagi antenna that was disassembled. I was told it was a Hy-Gain model. After laying out the parts I can see that it doesn't look like a Hy-Gain model because of the following:

1. It uses large diameter, single traps. These are identified with color coded lables (red, green and blue - radiator, director, etc.)

2. It doesn't have a "beta-match" - rather, it looks like the driven element is directly connected to the coax. The mounting of the driven element is almost exactly like the Hy-Gain style with insulators that are mounted into a clamp that surrounds the boom.

3. The director and reflector use boom mounts that are different than Hy-Gains. The mounts are made from aluminum extrusion and use a circular opening to mount to the boom and have a wide, flat top that the element bolts to.

Does anyone know what make and model this 3 element beam is? After I 'ID' it I can then get the assembly instructions so I know what dimensions to set up since all of the joints on the elements are "sliding joints" with clamps,

Thanks for the help,
Henry W7YBS

2427. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 14:02:24 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <U-6dnW66iKh0iIvanZ2dnUVZ_vGinZ2d@comcast.com>
Source record: 35359

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:13harrjebe7gjc5@corp.supernews.com...
> Tam/WB2TT wrote:
>>
>> If I had a huge metal roof like that, I would be tempted to try one of
>> the shortened verticals. The kind that requires radials - which would be
>> your roof.
>
> Unfortunately, a vertical makes a poor NVIS antenna.
>
> > . . .
>
> Roy Lewallen, W7EL

Still, a waste of a ground plane.

Tam/WB2TT

2428. Re: Antenna for receiving WWV/10MHz: am I asking too much?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 15:39:01 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <ff5aal$1jci$1@f04n12.cac.psu.edu>
Source record: 35360

Roy Lewallen wrote:
> Frnak McKenney wrote:
>> . . .
>> I guess I really should have sacrificed that goat. <grin?>
>
> Hey, it looks like you're figuring out some of the secret techniques of
> improving radio propagation!

But the goat finds it not at all satisfactory.

- 73 de Mike KB3EIA -

2429. Re: Help identify 3 ele beam

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 19:17:54 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <K-GdnWzwVPdGwovanZ2dnUVZ_g2dnZ2d@comcast.com>
Source record: 35361

"Henry Rogers" <radiomuseum@msn.com> wrote in message
news:5543-471611EF-3635@baytvnwsxa002.msntv.msn.com...
>I bought a 3 element trap yagi antenna that was disassembled. I was told
> it was a Hy-Gain model. After laying out the parts I can see that it
> doesn't look like a Hy-Gain model because of the following:
>
> 1. It uses large diameter, single traps. These are identified with color
> coded lables (red, green and blue - radiator, director, etc.)
>
This is exactly like my old Mosley TA33Jr. Not at all like the HyGain TH3.
Ditto for #2. On my TH33Jr, the elements were mounted via aluminum blocks
with little U bolts. If it is Mosley, the length of the boom will be a
giveaway as to which model. I would try to download some manuals from the
Mosley web site; it might be mosleyelec.com.

Tam

> 2. It doesn't have a "beta-match" - rather, it looks like the driven
> element is directly connected to the coax. The mounting of the driven
> element is almost exactly like the Hy-Gain style with insulators that
> are mounted into a clamp that surrounds the boom.
>
> 3. The director and reflector use boom mounts that are different than
> Hy-Gains. The mounts are made from aluminum extrusion and use a circular
> opening to mount to the boom and have a wide, flat top that the element
> bolts to.
>
> Does anyone know what make and model this 3 element beam is? After I
> 'ID' it I can then get the assembly instructions so I know what
> dimensions to set up since all of the joints on the elements are
> "sliding joints" with clamps,
>
> Thanks for the help,
> Henry W7YBS
>
>
>
>

2430. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 20:06:35 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99CD3E1AF4F91nonenowhere@61.9.191.5>
Source record: 35362

Owen Duffy <none@no.where> wrote in
news:Xns99CC8578547CBnonenowhere@61.9.191.5:

...
> So, isn't the coax and control line to the SG237 carrying current mode
> RF current, ie contibuting to radiation.

I will answer my own question...

In the absence of an effective device to prevent common mode feedline
current, your configuration where one side of the ladder line connects to
the 'ground' side of the nominally unbalanced tuner, and that same tuner
terminal connects to the outside of the feedline coax and control wires
(at RF), then you have a continuous RF common mode path to wherever the
coax and control lines connect and so on, they are just as much a part of
your radiator as the dipole wire.

Analysis of the 122' entre fed wire in isolation of the rest of the
antenna system are inadequate in explaining the difficulties you
encounter.

Owen

2431. Re: Help identify 3 ele beam

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 21:27:07 UTC
From: w5chr@bellsouth.net
Message-ID: <R6vRi.3968$Ia.69@bignews4.bellsouth.net>
Source record: 35363

"Henry Rogers" <radiomuseum@msn.com> wrote in message
news:5543-471611EF-3635@baytvnwsxa002.msntv.msn.com...
> I bought a 3 element trap yagi antenna that was disassembled. I was told
> it was a Hy-Gain model. After laying out the parts I can see that it
> doesn't look like a Hy-Gain model because of the following:
>
Henry:
What you have is an old Wilson antenna, most likely a System 33.
There are some manuals on the web, but I don't remember if this would be
one of them.
Majestic Communications here in Memphis bought the Wilson line many years
ago.
They have a FEW parts left, but they should be of some help for a manual.
Try 901 / 794-9494, and don't let them know I sent you!!!

Mike W5CHR
Memphis

2432. Re: Help identify 3 ele beam

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 22:05:26 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13hd1p6auh3eo6f@corp.supernews.com>
Source record: 35364

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
news:K-GdnWzwVPdGwovanZ2dnUVZ_g2dnZ2d@comcast.com...
>
> "Henry Rogers" <radiomuseum@msn.com> wrote in message
> news:5543-471611EF-3635@baytvnwsxa002.msntv.msn.com...
>>I bought a 3 element trap yagi antenna that was disassembled. I was told
>> it was a Hy-Gain model. After laying out the parts I can see that it
>> doesn't look like a Hy-Gain model because of the following:
>>
>> 1. It uses large diameter, single traps. These are identified with color
>> coded lables (red, green and blue - radiator, director, etc.)
>>
> This is exactly like my old Mosley TA33Jr. Not at all like the HyGain TH3.
> Ditto for #2. On my TH33Jr, the elements were mounted via aluminum
> blocks with little U bolts. If it is Mosley, the length of the boom will
> be a giveaway as to which model. I would try to download some manuals from
> the Mosley web site; it might be mosleyelec.com.

Unless Mosley has changed their policy they do not have any manuals on their
web site. A local ham tried to get some emailed from them and they would
not do it, but would sell him the manuals.

2433. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 22:32:38 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99CC9E200A087HuckleberryREMOVEbig@64.209.0.81>
Source record: 35365

> If I had a huge metal roof like that, I would be tempted to try one of
> the shortened verticals. The kind that requires radials - which would
> be your roof.
>

That is something we had not considered. Will keep that in mind.
Tnx.

> You are running coax from the tuner to the shack, right; with just the
> 14 feet of ladder line?

Yes, 14' ladderline from tuner to antenna center. About 100 ' of
RG-213 on roof and another 30' or so going down to station inside
building. We have a coax choke balun located in line on the roof about
8' before the coax goes down in the building.

Ed

2434. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 22:34:43 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99CC9E7ADCCEFHuckleberryREMOVEbig@64.209.0.81>
Source record: 35366

>
> Is the 237 designed for balanced antennas or single random wires, or
> either?
>
> bob
> k5qwg

Not sure what SGC recommends regarding balanced antennas.... will review their info. However, I have read numerous reports from hams who have used SGC and other similar tuners to feed balanced lines. The only important condition was to use a choke balun to keep RF from coming back down the coax shield.

Ed

2435. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 22:40:44 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99CC9F804F5FCHuckleberryREMOVEbig@64.209.0.81>
Source record: 35367

>
> The feedline is doing more than transporting energy to the dipole
> centre, it almost certainly carries a significant common mode current
> and in that case is just as much a part of the radiating system as the
> dipole itself.
>
> So, isn't the coax and control line to the SG237 carrying current mode
> RF current, ie contibuting to radiation.
>
> Inch by inch, the detail unfolds.
>

Yeah, inch by inch. I hate to fill up the post with too many details as some people grab something insignifcant and go off on a tangent.... however, the devil may be in the details.....

You're right on the current in the shield. We have a choke balun, currently located 85' down the coax toward the transmitter. I have it scheduled, when it stops raining, to move it up to the input of the SG-237 coupler unit. The Choke balun is homemade, 6" diamter, about 11 turns of RG-8X coax. Does that sound sufficient? I didn't make it or provide it. There is no control line for the SGC coupler unit. It only requires 12VDC @ 300ma and we are providing that by using a couple MFJ DC adapter units to feed the 12VDC up the coax.

Ed

2436. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 22:43:06 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99CC9FE65A5EEHuckleberryREMOVEbig@64.209.0.81>
Source record: 35368

>
> Ed, sounds like your radios are into VSWR turndown from the inability
> of the tuner to match at the low end. It could be that the Z at 3825
> is going high which a lot of tuners can't handle--or could be very
> low, same problem, no match. Try adding some more length to the
> dipole if you can and see if it tunes better at the low end. Even if
> you only drape pieces down at the ends would help if you can't extend
> more horizontally. 73,Bill W0BVR

You, and others earlier on in this thread, have suggested such a
thing. I have that on my list of things to try when the weather allows.
Tnx.

2437. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 23:12:45 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <tOidnRzfjad0C4vanZ2dnUVZ_o6knZ2d@comcast.com>
Source record: 35369

"Ed G" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns99CC9F804F5FCHuckleberryREMOVEbig@64.209.0.81...
>
>>
>> The feedline is doing more than transporting energy to the dipole
>> centre, it almost certainly carries a significant common mode current
>> and in that case is just as much a part of the radiating system as the
>> dipole itself.
>>
>> So, isn't the coax and control line to the SG237 carrying current mode
>> RF current, ie contibuting to radiation.
>>
>> Inch by inch, the detail unfolds.
>>
>
> Yeah, inch by inch. I hate to fill up the post with too many
> details as some people grab something insignifcant and go off on a
> tangent.... however, the devil may be in the details.....

You are right here. I have a feeling some people think you are running
ladder line to the radio.

>
> You're right on the current in the shield. We have a choke balun,
> currently located 85' down the coax toward the transmitter. I have it
> scheduled, when it stops raining, to move it up to the input of the SG-
> 237 coupler unit.

This has got to be a step in the right direction.

Tam/WB2TT

> The Choke balun is homemade, 6" diamter, about 11
> turns of RG-8X coax. Does that sound sufficient? I didn't make it or
> provide it. There is no control line for the SGC coupler unit. It only
> requires 12VDC @ 300ma and we are providing that by using a couple MFJ
> DC adapter units to feed the 12VDC up the coax.
>
>
> Ed
>
>

2438. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-17 23:20:44 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99CD5F050F4F8nonenowhere@61.9.191.5>
Source record: 35370

Ed G <Huckleberry_REMOVE_@bigvalley.net> wrote in
news:Xns99CC9F804F5FCHuckleberryREMOVEbig@64.209.0.81:

>
>>
>> The feedline is doing more than transporting energy to the dipole
>> centre, it almost certainly carries a significant common mode current
>> and in that case is just as much a part of the radiating system as the
>> dipole itself.
>>
>> So, isn't the coax and control line to the SG237 carrying current mode
>> RF current, ie contibuting to radiation.
>>
>> Inch by inch, the detail unfolds.
>>
>
> Yeah, inch by inch. I hate to fill up the post with too many
> details as some people grab something insignifcant and go off on a
> tangent.... however, the devil may be in the details.....

Yes, the people who modelled your antenna based on half the information
got an incorrect answer.

>
> You're right on the current in the shield. We have a choke balun,
> currently located 85' down the coax toward the transmitter. I have it
> scheduled, when it stops raining, to move it up to the input of the
SG-
> 237 coupler unit. The Choke balun is homemade, 6" diamter, about 11
> turns of RG-8X coax. Does that sound sufficient? I didn't make it or
> provide it. There is no control line for the SGC coupler unit. It
only
> requires 12VDC @ 300ma and we are providing that by using a couple MFJ
> DC adapter units to feed the 12VDC up the coax.

You need to visualise that you what you have looks like a dipole with a
wire from one side of the centre following the path of the feedlines to
the choke and from the choke on to wherever.

The choke balun introduces a common mode impedance in that equivalent
wire, but it does not necessarily eliminate common mode current, rather
it modifies the amplitude and distribution of the common mode current.

Owen

2439. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 00:00:53 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <gg8dh3h53cga72ri7u5vndivhaed4k7b69@4ax.com>
Source record: 35371

On 17 Oct 2007 22:40:44 GMT, Ed G <Huckleberry_REMOVE_@bigvalley.net>
wrote:

> It only
>requires 12VDC @ 300ma and we are providing that by using a couple MFJ
>DC adapter units to feed the 12VDC up the coax.

Hi Ed,

This is another antenna element unless you choke it too.

73's
Richard Clark, KB7QHC

2440. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 00:40:59 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1192668059.581928.72360@i38g2000prf.googlegroups.com>
Source record: 35372

On Oct 9, 11:35 pm, John Smith <assemblywiz...@gmail.com> wrote:
> art wrote:
> >www.newswise.com/articles/view/532935
>
> Yeah, ole' Robert Vincent is a sore spot in the NG, I'd imagine. Made
> A$$'es out of all the "experts" and continues to do so ... sometimes
> there is real justice.
>
> Regards,
> JS

I especially liked the experts who wouldn't use a B&W antenna under
any circumstance because it was inefficient. Even when the uses
included ALE, frequent frequency changes, and use in hostile
environments. They just gotta squeeze every last db out of a piece of
wire.

2441. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 01:31:59 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <jlyRi.11153$4V6.7813@newssvr14.news.prodigy.net>
Source record: 35373

Ed G wrote:
> Not sure what SGC recommends regarding balanced antennas.... will
> review their info. However, I have read numerous reports from hams who
> have used SGC and other similar tuners to feed balanced lines. The only
> important condition was to use a choke balun to keep RF from coming back
> down the coax shield.

My SG-230 manual says NOT to connect any transmission
line to the tuner output - to connect only an antenna.
--
73, Cecil http://www.w5dxp.com

2442. Re: Help identify 3 ele beam

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 01:38:39 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <BOyRi.7076$J36.823@newsfe07.phx>
Source record: 35374

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in message
news:K-GdnWzwVPdGwovanZ2dnUVZ_g2dnZ2d@comcast.com...
>
> "Henry Rogers" <radiomuseum@msn.com> wrote in message
> news:5543-471611EF-3635@baytvnwsxa002.msntv.msn.com...
>>I bought a 3 element trap yagi antenna that was disassembled. I was told
>> it was a Hy-Gain model. After laying out the parts I can see that it
>> doesn't look like a Hy-Gain model because of the following:
>>
>> 1. It uses large diameter, single traps. These are identified with color
>> coded lables (red, green and blue - radiator, director, etc.)
>>
> This is exactly like my old Mosley TA33Jr. Not at all like the HyGain TH3.
> Ditto for #2. On my TH33Jr, the elements were mounted via aluminum
> blocks with little U bolts. If it is Mosley, the length of the boom will
> be a giveaway as to which model. I would try to download some manuals from
> the Mosley web site; it might be mosleyelec.com.

Couln't find manuals at the Mosley site URL:
http://www.mosley-electronics.com/

But BAMA has the manual for the TA33JR
http://bama.sbc.edu/mosley.htm

LAMONT

2443. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 01:39:41 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99CCBDD80D14FHuckleberryREMOVEbig@198.186.192.196>
Source record: 35375

.
>
> Hi Ed,
>
> This is another antenna element unless you choke it too.
>
>

Richard, I don't think this one is. Its just a "barrel" type device
located in the coax run to the SGC coupler, about 1 foot from the input
to the SGC coupler.. There are no other connections or long runs of
anything going away from the coupler or the antenna. The MFJ adapter
merely filters the 12VDC off the coax center conductor and routes it
through a wire a couple feet long into the coupler 12VDC input.

Ed

2444. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 01:47:40 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99CCBF32A7879HuckleberryREMOVEbig@198.186.192.196>
Source record: 35376

>> Not sure what SGC recommends regarding balanced antennas.... will
>> review their info. However, I have read numerous reports from hams
>> who have used SGC and other similar tuners to feed balanced lines.
>> The only important condition was to use a choke balun to keep RF from
>> coming back down the coax shield.
>
> My SG-230 manual says NOT to connect any transmission
> line to the tuner output - to connect only an antenna.

SGC manual for the SG-237 says it is recommended to mount the coupler at the antenna feedpoint, but it will work on anything, including balanced line. They show a similar example to what we are doing in the manual.

Ed

2445. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 01:50:30 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <fnedh3lrf6rj8mr6li626ne18ljqfqreq0@4ax.com>
Source record: 35377

On 17 Oct 2007 22:34:43 GMT, Ed G <Huckleberry_REMOVE_@bigvalley.net>
wrote:

>
>>
>> Is the 237 designed for balanced antennas or single random wires, or
>> either?
>>
>> bob
>> k5qwg
>
> Not sure what SGC recommends regarding balanced antennas.... will
>review their info. However, I have read numerous reports from hams who
>have used SGC and other similar tuners to feed balanced lines. The only
>important condition was to use a choke balun to keep RF from coming back
>down the coax shield.
>
>
> Ed

Maybe one could say the ground side of the balanced line and its
dipole quarter wave are acting as an elevated counterpoise to the
"random wire" on the other side?

bob
k5qwg

2446. Re: Cheap n Easy Dipole Supports

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 04:16:53 UTC
From: "R. Scott" <lintardspamtrap@scotts-home.net>
Message-ID: <Zs-dnRmlnPmPQ4vanZ2dneKdnZydnZ2d@comcast.com>
Source record: 35378

w7psk@yahoo.com wrote:
> Ive had my Dipole tween two trees for years now. Next door always
> been rented and Mine has been there since the previous Owner let me
> hang it up there. Well the recent renters Hacked the cord. And I
> dont know the current owner. So I must do somthing in my yard.
> Except I can only go into one corner and it slopes pretty quick down
> about 8 feet at the end.

Tried 2 tv masts today 20ft total.

Antenna is A NW antennas L-160 loaded DIpole, fairly heavy.

Bent them suckers right over.

Need that tree next door back :)

Scotty W7PSK.

Dang, cant have Guy wires ...

2447. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 04:54:27 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13hdpo2scg9n65e@corp.supernews.com>
Source record: 35379

Bob Miller wrote:
>
> Maybe one could say the ground side of the balanced line and its
> dipole quarter wave are acting as an elevated counterpoise to the
> "random wire" on the other side?

Antenna systems are often a lot easier to analyze and understand if you put aside concepts like "counterpoise" and "ground".

An antenna is a two terminal device, even if it's "end fed". The transmitter is also a two terminal device. Connect the two together and you have an electrical circuit. Like any circuit, the current leaving one terminal has to equal the current going into the other terminal.

So what happens with an end fed antenna? Well, whatever the current going into the antenna (and current must go into it, since the power into it is I^2 * R, where R is the sum of radiation and loss resistance), an equal and opposite current must go somewhere else. If you succeed in completely choking off the current going somewhere else, you've also succeeded in choking off the current going to the antenna. So you don't want to do that.

Conductors don't care what label you put on them -- calling one a "ground" or "counterpoise" doesn't give it magical properties. When a current flows on a conductor, it creates a field. This field will radiate unless canceled by other fields. So the "somewhere else" that the current flows is just as much an antenna as the supposed antenna is.

If the current has nowhere else to go, it'll go down the outside of the coax, which will effectively become the other half of a dipole. If you choke off the current on the outside of the coax, it'll go somewhere else if it can. But if there is no other place, then the current to the antenna will drop -- the feedpoint impedance will increase.

If the current goes into two or more radial wires which are symmetrically placed, the fields from the wires will largely (but not completely) cancel, so the net radiation from the radials will be small. This can reasonably called a "counterpoise" -- a place for the current to flow without creating much radiation. Or you can connect the antenna to a buried radial field ("ground"), which behaves much the same way, but with even better field cancellation. But people often put these names on other configurations, expecting the currents or fields to behave differently than on other conductors.

But the things to remember are that all antennas have two terminals, and the current into one equals the current out of the other. And current

flowing along any conductor creates a field, whether you consider it to be an "antenna" or not. Keeping this in mind helps a lot in understanding end fed and other antennas.

Roy Lewallen, W7EL

2448. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 04:54:57 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <8npdh3tue7ng98u941rnnunodjlguv9474@4ax.com>
Source record: 35380

On 18 Oct 2007 01:39:41 GMT, Ed G <Huckleberry_REMOVE_@bigvalley.net>
wrote:

>.
>>
>> Hi Ed,
>>
>> This is another antenna element unless you choke it too.
>>
>>
>
> Richard, I don't think this one is. Its just a "barrel" type device
>located in the coax run to the SGC coupler, about 1 foot from the input
>to the SGC coupler.. There are no other connections or long runs of
>anything going away from the coupler or the antenna. The MFJ adapter
>merely filters the 12VDC off the coax center conductor and routes it
>through a wire a couple feet long into the coupler 12VDC input.

Hi Ed,

I stand corrected. You seem to have that one under control.

73's
Richard Clark, KB7QHC

2449. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 04:56:58 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13hdpspcm380v99@corp.supernews.com>
Source record: 35381

hot-ham-and-cheese@hotmail.com wrote:
>
> I especially liked the experts who wouldn't use a B&W antenna under
> any circumstance because it was inefficient. Even when the uses
> included ALE, frequent frequency changes, and use in hostile
> environments. They just gotta squeeze every last db out of a piece of
> wire.
>

Any "expert" who doesn't consider the application is no expert at all, and certainly not even a competent engineer. Who are these people you're speaking of, and why do you consider them "experts"?

Roy Lewallen, W7EL

2450. Re: B&W End-Fed Vee HF Antenna questions.

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 05:07:50 UTC
From: hot-ham-and-cheese@hotmail.com
Message-ID: <1192668617.225484.207760@k35g2000prh.googlegroups.com>
Source record: 35382

On Oct 13, 12:54 am, JIMMIE <JIMMIEDEE...@YAHOO.COM> wrote:
> On Oct 12, 8:42 pm, Skipp says please no spam <spamme...@yahoo.com>
> wrote:
>
> > Anyone ever taken a moment to measure the values of the balun and
> > termination network in a B&W End-Fed Vee HF Antenna?
>
> >http://www.bwantennas.com/ama/veeant.ama.htm
>
> > I'm curious if the Balun is 1:1 and if you've measured the value
> > the resistive value of the balance network at the end of the wire is?
>
> > Your replies and thoughts as to how this antenna works?
>
> > thanks
> > skipp
>
> > skipp025 at yahoo.com
>
> I saw someone selling the trerminators for this type of antenna at the
> last hamfest I attended, I think it was the Wireman but not sure.
>
> Probably a lot of bad things you could say about this antenna but it
> will get you on-the-air with a minimum of fuss. Govt uses these a lot
> for network communication where operation and setup is to be perfrmed
> by someone of minimal training.
>
> Jimmie

Minimal training? Just because they're not making ditty-boppers any
more doesn't mean they are minimally trained.

The gov't uses these a lot for network communication where operation
includes ALE, frequent frequency changes, and use in environments
where adjusting antenna length several times a day may expose soldiers
and airmen to hostile fire.

2451. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 11:01:36 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <l2HRi.5164$R95.3509@nlpi070.nbdc.sbc.com>
Source record: 35383

Ed G wrote:
> w5dxp wrote:
>> My SG-230 manual says NOT to connect any transmission
>> line to the tuner output - to connect only an antenna.
>
> SGC manual for the SG-237 says it is recommended to mount the coupler at
> the antenna feedpoint, but it will work on anything, including balanced
> line. They show a similar example to what we are doing in the manual.

Perhaps the SG-237 has some protection that the SG-230
didn't have? The wording in the SG-230 manual suggests
that, since the autotuner is capable of developing
voltages high enough to cause open-circuited coax
to arc, discretion is advised.
--
73, Cecil http://www.w5dxp.com

2452. Re: Cheap n Easy Dipole Supports

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 13:05:41 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <3rKdncs1meKLx4raRVnyvgA@pipex.net>
Source record: 35384

> Tried 2 tv masts today 20ft total.
> Antenna is A NW antennas L-160 loaded DIpole, fairly heavy.
> Bent them suckers right over.
> Need that tree next door back :)
==========
You might not need that tree,but instead stiffen the 2 TV masts,by
fitting (in the middle of each mast) 2 outriggers perpendicular to the
mast in the same vertical plane in line with the antenna.
You then connect the free ends of the outriggers with both top and
bottom of the mast using steel wire + tensioners.

Frank GM0CSZ / KN6WH

2453. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 13:37:06 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <nNKdnQH2JbHk_IranZ2dnUVZ_tSknZ2d@comcast.com>
Source record: 35385

>>
>> You're right on the current in the shield. We have a choke balun,
>> currently located 85' down the coax toward the transmitter. I have it
>> scheduled, when it stops raining, to move it up to the input of the SG-
>> 237 coupler unit.
>
> This has got to be a step in the right direction.
>
> Tam/WB2TT
>
I think I misunderstood by what you meant by INPUT. The choke goes between
the antenna and the tuner. Generally at the antenna feed point.

Tam/WB2TT

2454. Re: Help identify 3 ele beam

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 13:53:05 UTC
From: radiomuseum@msn.com
Message-ID: <5543-47176541-3906@baytvnwsxa002.msntv.msn.com>
Source record: 35386

Thanks for the help. The antenna is not a Mosley. I used to have a TA-33Jr. but this antenna is much larger. KW rated traps at least. I'll go with the Wilson SY-33 answer and see what I can find out. Thanks.
Henry W7YBS

2455. MA5B VS G3TPW CobWebb

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 15:19:05 UTC
From: Barrett <barrett@blueyounder.co.uk>
Message-ID: <JPKRi.374473$xp6.70764@fe3.news.blueyonder.co.uk>
Source record: 35387

I have a very small garden and the Cushcraft MAB5 will be over hanging the boundary. I know the Cobweb isn't a beam.

Has any one tried both and what is the difference between TX and RX between the MA5B and G3TPW CobWebb?

Thanks

2456. Re: Cheap n Easy Dipole Supports

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 15:56:57 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <dnLRi.11703$ID6.7135@newssvr27.news.prodigy.net>
Source record: 35388

Highland Ham wrote:
> You might not need that tree,but instead stiffen the 2 TV masts,by
> fitting (in the middle of each mast) 2 outriggers perpendicular to the
> mast in the same vertical plane in line with the antenna.
> You then connect the free ends of the outriggers with both top and
> bottom of the mast using steel wire + tensioners.

A friend of mine used the following technique at the
corner of his property using three guy wires. (fixed font)

```
\\-------------------------------------
|\\ Antenna
| \\
| \\
| \\
| \\Pole
| \\
|Guy \\
| \\
+--------\\---------------Earth--------
\\
\\
--
73, Cecil http://www.w5dxp.com
```

2457. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 16:21:51 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192724511.684781.290970@y27g2000pre.googlegroups.com>
Source record: 35389

On 17 Oct, 21:56, Roy Lewallen <w...@eznec.com> wrote:
> hot-ham-and-che...@hotmail.com wrote:
>
> > I especially liked the experts who wouldn't use a B&W antenna under
> > any circumstance because it was inefficient. Even when the uses
> > included ALE, frequent frequency changes, and use in hostile
> > environments. They just gotta squeeze every last db out of a piece of
> > wire.
>
> Any "expert" who doesn't consider the application is no expert at all,
> and certainly not even a competent engineer. Who are these people you're
> speaking of, and why do you consider them "experts"?
>
> Roy Lewallen, W7EL

Interesting aproach as to what a good engineer is.
It goes without saying that the application has to be considered, even
Yogi Bear
would have come up with a better one than that and he is not an
engineer.
As an engineer myself I consider a engineer or "expert" is one that
will consider
anything unless science has definitely ruled it out and that doesn't
neccesarily
include what has been written before the question arises. Natuarally
that means
not ruling out trying ANYTHING unless one considers their minds
developed enough
that it is satisfactory to go thru the thought processes only.
On that basis this newsgroup is full of fake " experts"!
Art KB9MZ

2458. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 17:56:36 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99CD6F5489C3FHuckleberryREMOVEbig@198.186.192.196>
Source record: 35390

> I think I misunderstood by what you meant by INPUT. The choke goes
> between the antenna and the tuner. Generally at the antenna feed
> point.
>
> Tam/WB2TT
>

Tam,

Wouldln't that would be a very bad idea, at least in our particular case? As I pointed out in the start of this thread, we are feeding the antenna with about 14' of 600 ohm ladder line from the output of the SGC antenna coupler. Isn't a choke balan used to prevent the flow of current in the outer braid of a coax feedline? We certainly wouldn't want to be choking any RF coming out of the SGC coupler going to the antenna!

Ed

2459. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 18:48:44 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ff89qebko1@news.albasani.net>
Source record: 35291

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20071018005491&newsLang=en

JS

2460. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 18:51:09 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ff89uv$b0l$1@news.albasani.net>
Source record: 35292

Roy Lewallen wrote:

> ...
> speaking of, and why do you consider them "experts"?
>
> Roy Lewallen, W7EL

YEAH!

And besides, "Where's the beef?" ;-)

JS

2461. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 19:15:51 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <14cfh3teu5op8lc1da0q72ho97pkgtlmla@4ax.com>
Source record: 35293

On Wed, 17 Oct 2007 21:54:27 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>Bob Miller wrote:
>>
>> Maybe one could say the ground side of the balanced line and its
>> dipole quarter wave are acting as an elevated counterpoise to the
>> "random wire" on the other side?
>
>Antenna systems are often a lot easier to analyze and understand if you
>put aside concepts like "counterpoise" and "ground".
>
>An antenna is a two terminal device, even if it's "end fed". The
>transmitter is also a two terminal device. Connect the two together and
>you have an electrical circuit. Like any circuit, the current leaving
>one terminal has to equal the current going into the other terminal.
>
>So what happens with an end fed antenna? Well, whatever the current
>going into the antenna (and current must go into it, since the power
>into it is I^2 * R, where R is the sum of radiation and loss
>resistance), an equal and opposite current must go somewhere else. If
>you succeed in completely choking off the current going somewhere else,
>you've also succeeded in choking off the current going to the antenna.
>So you don't want to do that.
>
>Conductors don't care what label you put on them -- calling one a
>"ground" or "counterpoise" doesn't give it magical properties. When a
>current flows on a conductor, it creates a field. This field will
>radiate unless canceled by other fields. So the "somewhere else" that
>the current flows is just as much an antenna as the supposed antenna is.
>
>If the current has nowhere else to go, it'll go down the outside of the
>coax, which will effectively become the other half of a dipole. If you
>choke off the current on the outside of the coax, it'll go somewhere
>else if it can. But if there is no other place, then the current to the
>antenna will drop -- the feedpoint impedance will increase.
>
>If the current goes into two or more radial wires which are
>symmetrically placed, the fields from the wires will largely (but not
>completely) cancel, so the net radiation from the radials will be small.
>This can reasonably called a "counterpoise" -- a place for the current
>to flow without creating much radiation. Or you can connect the antenna
>to a buried radial field ("ground"), which behaves much the same way,
>but with even better field cancellation. But people often put these

>names on other configurations, expecting the currents or fields to
>behave differently than on other conductors.
>
>But the things to remember are that all antennas have two terminals, and
>the current into one equals the current out of the other. And current
>flowing along any conductor creates a field, whether you consider it to
>be an "antenna" or not. Keeping this in mind helps a lot in
>understanding end fed and other antennas.
>
>Roy Lewallen, W7EL

Roy, thank you for the clarification. You oughtta write a book one of
these days :-)

Bob
k5qwg

2462. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 19:50:13 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99CE3B542E2C1nonenowhere@61.9.191.5>
Source record: 35294

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in
news:nNKdnQH2JbHk_IranZ2dnUVZ_tSknZ2d@comcast.com:

>>>
>>> You're right on the current in the shield. We have a choke balun,
>>> currently located 85' down the coax toward the transmitter. I have
>>> it scheduled, when it stops raining, to move it up to the input of
>>> the SG- 237 coupler unit.
>>
>> This has got to be a step in the right direction.
>>
>> Tam/WB2TT
>>
> I think I misunderstood by what you meant by INPUT. The choke goes
> between the antenna and the tuner. Generally at the antenna feed
> point.
>
> Tam/WB2TT
>
>

Tam,

Can you explain the difference between putting the choke adjacent to and
on either side of the tuner?

Owen

2463. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 20:03:55 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192737835.891239.297670@e9g2000prf.googlegroups.com>
Source record: 35295

On 18 Oct, 11:51, John Smith <assemblywiz...@gmail.com> wrote:
> Roy Lewallen wrote:
>
> > ...
>
> > speaking of, and why do you consider them "experts"?
>
> > Roy Lewallen, W7EL
>
> YEAH!
>
> And besides, "Where's the beef?" ;-)
>
> JS

Actually John my beef is that the rule for the most efficient
radiation
is that "if a radiating element is resonant and in equilibrium it can
be of any shape, size or
elevation". Yet that is ignored by the so called experts of the
amateur ranks.
I can only assume that most think themselves as being experts that
they do
not find a need to get up from the couch and try things knowing that
there
is no room for surprises over their own superior brain power.
How many would admit that :for a given polarization the best results
are NOT
at right angles or parallel to earth" ? And as somebody said "If it
was really
true it would have been invented a long time ago" as if all
discoveries have
their own time scale for discovery and time has expired for antennas
Art KB9MZ....XG
Art KB9MZ
over their thoughts.

2464. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 20:11:47 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <76PRi.6825$lE2.4145@newssvr22.news.prodigy.net>
Source record: 35296

Owen Duffy wrote:
> Can you explain the difference between putting the choke adjacent to and
> on either side of the tuner?

How about a tutorial on choking common-mode
current on ladder-line?
--
73, Cecil http://www.w5dxp.com

2465. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 21:01:17 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <88hfh398krgacunkud42j89r9pfg2u9iik@4ax.com>
Source record: 35297

On Thu, 18 Oct 2007 13:03:55 -0700, art <aunwin@insightbb.com> wrote:

> the rule for the most efficient
>radiation
>is that "if a radiating element is resonant and in equilibrium it can
>be of any shape, size or
>elevation".

Hmmm, take the cover off any HF tube transmitter. It has an element that is resonant - called the Plate Load. It is of any shape. It must be quiting Librium. It is of any size. It is at some elevation (you may raise the transmitter if you wish).

Yet and all, it makes one of the worst HF antennas ever to come down the pike in the past three centuries or two millenniums.

We can all agree that if Arthur had any pride in his theory, he wouldn't be building antennas having already satisfied EVERY proviso with a Plate Load.

>Yet that is ignored by the so called experts of the
>amateur ranks.

EVERY amateur can test this one idea. Most who did, abandoned this theory immediately as obviously deeply inferior.

No experts were called, implicated, consulted, used or maimed in the making of this announcement - except, possibly, the previous two correspondents. Torts limitations have capped their flamboyant claims to the value of their posts: 2ï¿½ (adjusted for inflation equal only to the Weimar Republic Mark).

73's
Richard Clark, KB7QHC

2466. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 21:33:53 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192743233.590386.300900@q5g2000prf.googlegroups.com>
Source record: 35298

On 18 Oct, 14:01, Richard Clark <kb7...@comcast.net> wrote:
snip
>
> We can all agree that if Arthur had any pride in his theory, he
> wouldn't be building antennas having already satisfied EVERY proviso
> with a Plate Load.
>
> >Yet that is ignored by the so called experts of the
> >amateur ranks.
>
> EVERY amateur can test this one idea. Most who did, abandoned this
> theory immediately as obviously deeply inferior.
>

> 73's
> Richard Clark, KB7QHC

You make my point. I have a lot of pride in my findings and
as yet no amateur has made it otherwise they would be shouting
from the roof tops. There are many so called experts who write
about antennas, some even have written books no less but they
get so upset when others write things down for antennas I
suppose because they have gone thru life without making one experiment
relying on their superior brain power so they do not have to lift a
finger.
If they choose not to agree then all others are frauds no less.
Kudos to JS he actually made a Vincent antenna for himself to prove
things.
Kudo's to those who have AO optimisers where they can model these
things for themselves.
Yes a optimizer bound by Maxwell's rules produces the Gaussian
radiators if you ask for
arrays, a radiator or maximum polarity radiation and without tieing it
down to a planar form.
And yes, all other antenna programs verify what the AO optimiser
program supplies.
I don't give one hoot for what you think about it since you do not
posses
an engineering degree and never writes anything of substance, where as
this discovery is all mine.
Oh and another thing I suspect Roys program would also verify the
results of the AO
optimizer just by duplicating the results given since he doesn't
posses any optimiser features.
Are we ready to say that if a antenna program based on Maxwell's rules

provides a gaussian antenna
then programs based on Maxwell follow the "garbage in garbage out
adage". Your choice
It is unusual for me to correspond to you because of your endless
lies and mockery of other people so make the best of this one as
it is going to be a long time.....

2467. Re: Ferrite Chokes: What is the maximum impedance that can be obtained?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 22:06:49 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <1192745209.288691.26400@v23g2000prn.googlegroups.com>
Source record: 35299

On Oct 16, 8:19 pm, Roy Lewallen <w...@eznec.com> wrote:
> Thanks for the comments. Once again, I scanned a posting too hastily,
> and somehow missed the "transmitter" part. My comments were appropriate
> for a receiving antenna, not transmitting. So let me try to answer both
> Tom's and Mark's postings more appropriately.
>
> None of us has a constant current source with which to drive an antenna,
> but generally a source with a fixed amount of power and a finite source
> impedance. If we did have a constant current source, then yes, adding
> more and more ferrite cores would result in more and more power being
> delivered by the source, a larger and larger fraction of which would be
> dissipated in the ferrite. A 1 megohm resistor would get a bundle of
> power from our source, and a 10 megohm resistor would get 10 times as much.
>
> If we have a tuner, we can adjust our source impedance over some range.
> Provided that the feedpoint impedance is within that range with the
> ferrites in place, we can deliver all our power to the ferrite-antenna
> combination. I believe that the fraction of the power applied to the
> antenna which ends up in the ferrites monotonically increases as we add
> ferrites (assuming we don't move the previously added ones). If the
> ferrites were all at the base, the equivalent load circuit would be just
> two impedances in series -- the ferrite impedance and the antenna
> feedpoint impedance, and it would behave as Tom said. But putting the
> ferrite cores anywhere but the base changes the antenna current
> distribution, which has a potentially complex effect on the feedpoint
> impedance other than just adding the transformed impedance of the core.
> This means that not only does Tom's Z3 increase as we add ferrites, but
> Z1 changes also.
>
> Roy Lewallen, W7EL
>
>

thanks for the replies...
so for talking purposes:

Z1 is the antenna feedpoint Z and we will define "antenna" as the
exposed wire after the end of the ferrite tube.

Z2 is the Z of the wire passing though the ferrite

Z3 is the source Z which I will stipulate is 50 Ohms

OK as we add ferrite to the antenna, Z1 changes because the antenna is
getting shorter as the ferrite is getting longer. i.e. if there is 7"
of ferrite, then there is only 12" of exposed antenna and it is

elevated over the ground plane so Z1 is going up. In the end case, when the ferrite is 19" there is no antenna Z1 becomes infinity.

Then looking into the base (thinking as lumped elements), we have Z2 + Z1. Since Z1 is infinity, the base must look like infinity, but this does not pass common sense.

In other words, what is the Z looking into a 19" wire that is inside 19" of ferrite. Thinking in lumped element terms, it would be very high and little power will flow. Thinking in distributed terms there will be some relatively low Z looking into the base, power will flow and the ferrite will dissipate heat. The base Z would be related to some property of the ferrite like the property of free space has a Z of 377.

What is that propery and what would a typical Z be?

Mark

2468. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 22:28:56 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <ff8mnfmh1@aioe.org>
Source record: 35300

"art" wrote
> Actually John my beef is that the rule for the most efficient
> radiation is that "if a radiating element is resonant and in
> equilibrium it can be of any shape, size or elevation".
> Yet that is ignored by the so called experts of the
> amateur ranks.

So, art, you are quoting yourself as an authority, whose beliefs are ignored by others having academic credentials/experience in the field of professional antenna engineering -- in which you have admitted you have NO credentials?

> How many would admit that :for a given polarization the best results
> are NOT at right angles or parallel to earth" ? And as somebody said
> "If it was really true it would have been invented a long time ago"

Which somebody are you quoting? I suspect you are referring to me in one of my direct email responses to you, which I paste below (my text only). Note that your "quote" above is a great stretch from what I wrote in that email.

\\ Enthusiasm is always good, but if it was possible to do what you outline using the radiation possible on 160 m solely from a structure in the shape of a 4 ft cube, IMO it would have been done long ago.

Some very experienced antenna engineers including George Brown of RCA, Carl E. Smith, John Kraus, C. Balanis and many others have investigated this subject over the last 60-70 years, and have concluded that nothing smaller is as effective on MW as a linear, vertical monopole at least 1/4-wave high, using a good r-f ground.

I'd suggest that you conduct very good pattern and gain tests for whatever you build. This is not a simple project. If you decide to proceed I suggest that your tests be done and documented very carefully with calibrated instruments, and in an acceptable, scientific manner that can be endorsed and repeated by qualified investigators.

If you do that, history suggests that you will find that the performance of your design does not meet your expectations. But better to know that early on, so that you won't publish information that discredits you. //

RF

2469. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-18 22:52:39 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <l3nfh3lmdvsltjb4kc26c4tgpej7muf9hm@4ax.com>
Source record: 35301

On Thu, 18 Oct 2007 14:33:53 -0700, art <aunwin@insightbb.com> wrote:

>On 18 Oct, 14:01, Richard Clark <kb7...@comcast.net> wrote:
>snip
>>
>> We can all agree that if Arthur had any pride in his theory, he
>> wouldn't be building antennas having already satisfied EVERY proviso
>> with a Plate Load.
(We must all agree that Arthur, who faithfully and selectively quoted
me above, didn't actually read this line - did he?)
>>
>> >Yet that is ignored by the so called experts of the
>> >amateur ranks.
>>
>> EVERY amateur can test this one idea. Most who did, abandoned this
>> theory immediately as obviously deeply inferior.
>>
>
>> 73's
>> Richard Clark, KB7QHC
>
>You make my point.

You have abandoned all antennas other than a Plate Load. (Delicious
irony for English Major versus the titan of random engineering.)

So, you made your point, I made your point, the point has been made.
Is it all down to waiting for the Load's white smoke to come out of
the Vatican chimney? An ecumenical QSO.

73's
Richard Clark, KB7QHC

2470. What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 00:04:26 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192752266.341085.215020@v23g2000prn.googlegroups.com>
Source record: 35302

Pseudo experts of fractional wavelength antennas.
Where does the current flow when it reaches the END of a fractional
length?
verticle antenna and why?
How does this relate to the term "end effect"?
If you have already written a book then tell us what the auther said.
Art KB9MZ.....XG

2471. Re: Ferrite Chokes: What is the maximum impedance that can be obtained?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 00:16:26 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <IHSRi.6829$IE2.4458@newssvr22.news.prodigy.net>
Source record: 35303

Mark wrote:
> On Oct 16, 8:19 pm, Roy Lewallen <w...@eznec.com> wrote:
>> Thanks for the comments. Once again, I scanned a posting too hastily,
>> and somehow missed the "transmitter" part. My comments were appropriate
>> for a receiving antenna, not transmitting. So let me try to answer both
>> Tom's and Mark's postings more appropriately.
>>
>> None of us has a constant current source with which to drive an antenna,
>> but generally a source with a fixed amount of power and a finite source
>> impedance. If we did have a constant current source, then yes, adding
>> more and more ferrite cores would result in more and more power being
>> delivered by the source, a larger and larger fraction of which would be
>> dissipated in the ferrite. A 1 megohm resistor would get a bundle of
>> power from our source, and a 10 megohm resistor would get 10 times as much.
>>
>> If we have a tuner, we can adjust our source impedance over some range.
>> Provided that the feedpoint impedance is within that range with the
>> ferrites in place, we can deliver all our power to the ferrite-antenna
>> combination. I believe that the fraction of the power applied to the
>> antenna which ends up in the ferrites monotonically increases as we add
>> ferrites (assuming we don't move the previously added ones). If the
>> ferrites were all at the base, the equivalent load circuit would be just
>> two impedances in series -- the ferrite impedance and the antenna
>> feedpoint impedance, and it would behave as Tom said. But putting the
>> ferrite cores anywhere but the base changes the antenna current
>> distribution, which has a potentially complex effect on the feedpoint
>> impedance other than just adding the transformed impedance of the core.
>> This means that not only does Tom's Z3 increase as we add ferrites, but
>> Z1 changes also.
>>
>> Roy Lewallen, W7EL
>>
>>
>
> thanks for the replies...
> so for talking purposes:
>
> Z1 is the antenna feedpoint Z and we will define "antenna" as the
> exposed wire after the end of the ferrite tube.
>
> Z2 is the Z of the wire passing though the ferrite
>
> Z3 is the source Z which I will stipulate is 50 Ohms
>

> OK as we add ferrite to the antenna, Z1 changes because the antenna is
> getting shorter as the ferrite is getting longer. i.e. if there is 7"
> of ferrite, then there is only 12" of exposed antenna and it is
> elevated over the ground plane so Z1 is going up. In the end case,
> when the ferrite is 19" there is no antenna Z1 becomes infinity.
>
> Then looking into the base (thinking as lumped elements), we have Z2 +
> Z1. Since Z1 is infinity, the base must look like infinity, but this
> does not pass common sense.
>
>
> In other words, what is the Z looking into a 19" wire that is inside
> 19" of ferrite. Thinking in lumped element terms, it would be very
> high and little power will flow. Thinking in distributed terms there
> will be some relatively low Z looking into the base, power will flow
> and the ferrite will dissipate heat. The base Z would be related to
> some property of the ferrite like the property of free space has a Z
> of 377.
>
> What is that propery and what would a typical Z be?
>
> Mark
>
>
>
>

Ferrites are notoriously non-linear, and thinking of them in
linear terms is liable to lead to disappointment. Look at
the manufacturer's data before you come to any conclusions regarding
how any of them behave.
73,
Tom Donaly, KA6RUH

2472. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 00:58:21 UTC
From: Richard Clark <kb7qhc@comcast.net>
Message-ID: <3gvfh3h17rl000n712ti5psfjm3pvs60g2@4ax.com>
Source record: 35304

On Thu, 18 Oct 2007 17:04:26 -0700, art <aunwin@insightbb.com> wrote:

>Where does the current flow when it reaches the END of a fractional
>length?

Does this question anticipate your introduction of a PaleoGaussic
theory of any single electron flowing from end-to-end (of any antenna)
in the time it takes to resonate?

Hint: Even an English Major knows Electrons at 160M would barely
wiggle an ï¿½M away from the feedpoint before they turned around and
went back on the next half of the first cycle - etc.

73's
Richard Clark, KB7QHC

2473. New patent application rules

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 01:51:48 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192758708.381653.311750@v23g2000prn.googlegroups.com>
Source record: 35305

In reading up on the new rules for patent continuations and cost
changes e.t.c.
I decided to review patents applied lately for antennas.
To my surprise I could not find any new listing of a patent request on
antennas from private entities.
Applications listed were only those that had transferred direct
authority in dealing with the patent office
Now I know personally that there are patents applied for by the
inventors themselves so why are they kept secret
from the public at large? I am guessing but I can only assume that a
private claim can obtain authority
to change content later with the examiners assistance where-as others
cannot. If so this can affect the new continuance rulings immensly.
Vincent got his antenna continuance claims in just about a month
before the rules changed. Rules have also been revised on the
substance of claims presumably to retard the increasing number of
counter claims tho no doubt it will open more paths to circumvent
existing patents. Just like politics, the more you revise policy the
more you increase loopholes and the more money exchanges hands between
those who introduce "corrective" additions. Some fees have gone up by
3% which is rare considering present social security increases so the
PTO at Crystal City is being really genourous
Art Unwin KB9MZ......xg

2474. Re: Ferrite Chokes: What is the maximum impedance that can be obtained?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 01:56:48 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13hg3n18huug58d@corp.supernews.com>
Source record: 35306

Tom Donaly wrote:
>
> Ferrites are notoriously non-linear, and thinking of them in
> linear terms is liable to lead to disappointment. Look at
> the manufacturer's data before you come to any conclusions regarding
> how any of them behave.
> 73,
> Tom Donaly, KA6RUH

Good advice. In antenna applications, we need to strive to keep the flux density low enough that ferrites behave essentially linearly. If we don't, harmonic generation will result.

Fortunately for us, the flux density decreases as frequency increases, all else being equal. Also, many ferrites which are commonly used for common mode chokes (current baluns), EMI filters, and the like will get hot enough to explode before the flux density gets anywhere near saturation.

Roy Lewallen, W7EL

2475. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 02:48:03 UTC
From: nm5k@wt.net
Message-ID: <1192762083.100825.178700@q5g2000prf.googlegroups.com>
Source record: 35307

On Oct 18, 3:03 pm, art <aun...@insightbb.com> wrote:

>
> Actually John my beef is that the rule for the most efficient
> radiation
> is that "if a radiating element is resonant and in equilibrium it can
> be of any shape, size or
> elevation". Yet that is ignored by the so called experts of the
> amateur ranks.

Maybe because it's not true.. :/
Whether or not an antenna is resonant means very little.
Most any wire will radiate nearly all power applied to it.
It doesn't matter if it's a full wave, half wave, quarter wave,
or even 1/16 of a wave.
And I don't even consider myself an expert, and can
comprehend and retain that simple fact of life.
My usual antennas used do happen to be resonant, but it has
nothing to do with the efficiency of the antennas themselves.
The reason I radiate over 90-95 percent of my power is because
I'm feeding the 50 ohm antenna with fairly low loss 50 ohm
feed line from a 50 ohm radio with no garbage in between.
In other words, I'm getting most of my power to the antenna.
And like I say, once you get it there, it will be radiated, no
matter what size or shape the antenna.
It doesn't take an expert to know that. It's in most all of the
books and can be read by anyone.

Would I use an antenna with an intentional resister?
No.
Do I care if anyone else does?
No.
I have ways of doing the same "all band" job and not lose
efficiency. You will never see me running a dummy load
on a stick or wire...
But thats just me.. I'm kind of anal when it comes to turning
my RF into heat.
MK

2476. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 03:29:52 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <-e6dnVeFKNA4uYXanZ2dnUVZ_vCknZ2d@comcast.com>
Source record: 35308

"Ed G" <Huckleberry_REMOVE_@bigvalley.net> wrote in message
news:Xns99CD6F5489C3FHuckleberryREMOVEbig@198.186.192.196...
>
>> I think I misunderstood by what you meant by INPUT. The choke goes
>> between the antenna and the tuner. Generally at the antenna feed
>> point.
>>
>> Tam/WB2TT
>>
>
> Tam,
>
> Wouldln't that would be a very bad idea, at least in our particular
> case? As I pointed out in the start of this thread, we are feeding the
> antenna with about 14' of 600 ohm ladder line from the output of the SGC
> antenna coupler. Isn't a choke balan used to prevent the flow of current
> in the outer braid of a coax feedline? We certainly wouldn't want to be
> choking any RF coming out of the SGC coupler going to the antenna!
>
> Ed
>
The choke suppresses the common mode signal. There will still be current flowing on the shield which will have the same magnitude as the current flowing in the center conductor. You are not throwing away any energy by doing this. If you put the choke at the antenna feed point, the transmission line will not radiate and act as part of the antenna. The choke as you described it could also be called a 1:1 current balun. You might want to take a look at the ARRL Handbook.

As for the 600 Ohm line, it is not obvious that 14 feet of 600 Ohm line with an SWR of 120:1 is better than 14 feet of RG8 with an SWR of 10:1. (I came up with an impedance at 3800 of 5 Ohms, assuming a perfect ground. If the roof is not that good a ground, you will want to add a couple of Ohms to that).

You guys could solve a lot of the mystery by measuring the SWR as close to the feedpoint of the antenna as possible.

Tam/WB2TT

2477. Re: Ferrite Chokes: What is the maximum impedance that can be obtained?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 04:07:11 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13hgbbfmg4qqv0b@corp.supernews.com>
Source record: 35309

Mark wrote:
>
> thanks for the replies...
> so for talking purposes:
>
> Z1 is the antenna feedpoint Z and we will define "antenna" as the
> exposed wire after the end of the ferrite tube.
>
> Z2 is the Z of the wire passing though the ferrite
>
> Z3 is the source Z which I will stipulate is 50 Ohms

Ok.

> OK as we add ferrite to the antenna, Z1 changes because the antenna is
> getting shorter as the ferrite is getting longer. i.e. if there is 7"
> of ferrite, then there is only 12" of exposed antenna and it is
> elevated over the ground plane so Z1 is going up. In the end case,
> when the ferrite is 19" there is no antenna Z1 becomes infinity.
>
> Then looking into the base (thinking as lumped elements), we have Z2 +
> Z1. Since Z1 is infinity, the base must look like infinity, but this
> does not pass common sense.

Why not? A zero length antenna is an open circuit, which has an infinite impedance. What would you expect the impedance of a zero length antenna to be?

> In other words, what is the Z looking into a 19" wire that is inside
> 19" of ferrite. Thinking in lumped element terms, it would be very
> high and little power will flow.

That's correct.

> Thinking in distributed terms there
> will be some relatively low Z looking into the base, power will flow
> and the ferrite will dissipate heat.

Can you explain how you reach that conclusion?

> The base Z would be related to
> some property of the ferrite like the property of free space has a Z
> of 377.

The ferrite with wire inside comprises half of a circuit -- I posted more about this a day or so ago. The only reason current flows into an open-ended wire like a whip antenna -- that is, the only reason the whip

doesn't have an infinite input impedance -- is that the field created by the alternating current in the wire couples to some other conductor which is the other half of the circuit. The field induces a current in that second conductor which flows into the other terminal. And that current creates a field which couples into the whip, sustaining current in it. If you could prevent the field from the wire from coupling to the ground plane, no further current would flow into the wire and it would indeed look like an open circuit. The ferrite does essentially just this.

> What is that propery and what would a typical Z be?

The ferrite has an intrinsic impedance, as does free space and every other medium. It's the ratio of E to H fields of a TEM wave in the material. But what does that have to do with this?

Roy Lewallen, W7EL

2478. Re: Ferrite Chokes: What is the maximum impedance that can be obtained?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 07:02:42 UTC
From: Wimpie <wimtel@tetech.nl>
Message-ID: <1192734108.061237.325730@t8g2000prg.googlegroups.com>
Source record: 35310

On 16 oct, 23:02, Mark <makol...@yahoo.com> wrote:
> The best way to ask my question is to use a thought experiment.
>
> Imagine I have a bucket of ferrite rings. Assume that the permeability
> and other material properties of each ring is such that I get about
> 100 Ohms of resistive loss for one turn through a ring at 144 MHz.
>
> Now assume I have 19" whip on top of a car connected to a 144 MHz
> transmitter. If I slip one ring over the whip and let it down to the
> bottom feedpoint, it will attenuate the signal by adding 100 Ohms in
> series with the feed of the antenna which otherwise would look like
> about 30 Ohms. That seems clear and seems to agree with common sense
> and observations.
>
> Now if I stack up 20 ferrite rings on the antenna, if we analyze each
> ring as a lumped element we would have 2000 Ohms in series and
> essentially an open circuit and little current or power will flow.
>
> However this does not pass the common sense test. Common sense says
> the ferrite tube will absorb the energy from the antenna and
> potentially will get hot and that the feedpoint Z of the antenna will
> NOT raise indefinitely with more and more ferrites but rather it seems
> it would level out to some value. We need to use distributed rather
> than lumped analysis.
>
> Bottom line question... How to determine the feedpoint Z of a wire
> that is inside a ferrite tube?
>
> thanks
> Mark

Hi Mark,

Good question, but difficult answer. I think the best way is to see
the construction as a transmission line (as you suggested) . If the
ferrite should have no losses, the inductance/m rises significantly.
The capacitance/m rises also (because of the eps.r of the ferrite
material).

So you will end up with a high Z transmission line with significantly
lower propagation speed. A difficulty is: where is the return
conductor? You can assume the return conductor about 0.125 lambda
away when the influence of the ferrite is not that large. Very close
to the feedpoint, the impedance of the ferrite loaded line is strongly
dependent on the distance from the feedpoint.

When the transmission line would be loss free, the impedance at the feedpoint is strongly dependent on the termination (because all energy may be reflected back). This is in many (wide band) cases undesirable. It is the reason that I do not recommend 4C65 material for current mode baluns at low frequency (the Q of the 4C65 ferrite material is rather high at, for example, 80m).

Sometimes we can be happy that ferrite has (some) losses. In that case the forward and reflected wave both suffer losses and the input impedance becomes less sensitive to load variations at the other side of the one turn ferrite inductor. So practically spoken, yes, when you add infinite ferrites, the impedance will reach a finite value.

In a real world, the situation is more complicated, because when using High permeability cores, you also have high permittivity. The propagation speed in the ferrite material itself can be that low that the flux density distribution is no longer uniform. This causes the effective permeability to change faster then expected based on the datasheet of the ferrite material. Above a certain size, adding thicker ferrites (in outer diameter) does not increase the inductance/ loss.

When you would take a long thick ferrite tube, the field will even not come out of the ferrite because of the attenuation in combination with the low EM wave propagation speed inside the ferrite. Ferrite absorbing tiles also make use of both the epsilon.r and permeability.

So finally I did not answer your question about how to determine the feedpoint impedance. Probably you will need full 3D EM software that can handle 3D structures of different mu and eps. As far as I know, all momentum based EM software cannot handle this.

Hope this will help a bit.

Wim
PA3DJS
www.tetech.nl

2479. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 07:39:38 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99CEB39ADABC7nonenowhere@61.9.191.5>
Source record: 35311

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in
news:-e6dnVeFKNA4uYXanZ2dnUVZ_vCknZ2d@comcast.com:

...
> The choke suppresses the common mode signal. There will still be
> current flowing on the shield which will have the same magnitude as
> the current flowing in the center conductor. You are not throwing away
...

This might just be really loose language, but assuming fully effective skin effect (which is a reasonable assumption for most practical coaxial cables at HF):

The current flowing on the outside of the inner conductor is accompanied by a current equal in magnitude and opposite in direction flowing on the inside of the outer conductor.

Skin effect isolates the inner of the outer conductor from the outer of the outer conductor, but current on the inner of the outer conductor may contribute to current on the outer of the outer conductor depending on the treatment of the shield at the ends of the cable.

So, a choke formed by coiling the coaxial cable or placing ferrite sleeves on the cable affects the impedance in the current path of the outer of the outer conductor and does not directly affect what is happening inside the coax.

Mind you, this concept is not universally accepted by hams.

In the case of coax, so-called common mode current flows only on the outside of the outer conductor, and differential mode current flows only on the inside of the outer conductor and outside of the inner conductor.

Owen

2480. Re: Ferrite Chokes: What is the maximum impedance that can be obtained?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 09:12:50 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13hgt8i7fs0uo81@corp.supernews.com>
Source record: 35312

Wimpie wrote:
>
> So you will end up with a high Z transmission line with significantly
> lower propagation speed. A difficulty is: where is the return
> conductor? You can assume the return conductor about 0.125 lambda
> away when the influence of the ferrite is not that large. Very close
> to the feedpoint, the impedance of the ferrite loaded line is strongly
> dependent on the distance from the feedpoint.
> . . .

The second conductor of the transmission line is the ground plane.

> When you would take a long thick ferrite tube, the field will even not
> come out of the ferrite because of the attenuation in combination with
> the low EM wave propagation speed inside the ferrite. Ferrite
> absorbing tiles also make use of both the epsilon.r and permeability.
>
> So finally I did not answer your question about how to determine the
> feedpoint impedance. Probably you will need full 3D EM software that
> can handle 3D structures of different mu and eps. As far as I know,
> all momentum based EM software cannot handle this.

I don't believe that's necessary. As you say, the field doesn't escape the ferrite. This means that the E field between transmission line conductors (the whip and ground plane) is zero. Therefore, the impedance of the line (E/H) is infinite. The loss of the ferrite is adequate to suppress any reflections from the end of the line. A reflectionless, infinite impedance line will have an infinite input impedance. This is, as it should be, the same result I got from a somewhat different perspective.

Roy Lewallen, W7EL

2481. Re: Ferrite Chokes: What is the maximum impedance that can be obtained?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 09:59:28 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <uLCdndqFfpdR4oXanZ2dnUVZ8qaqnZ2d@pipex.net>
Source record: 35313

Roy Lewallen wrote:
> Good advice. In antenna applications, we need to strive to keep the flux
> density low enough that ferrites behave essentially linearly. If we
> don't, harmonic generation will result.
==========
A question : Is the above the reason why current baluns wound on a
ferrite toroid with ,say, a total of 10 windings , can be best made by
having 5 windings wound in 1 direction and the other 5 in the opposite
direction ?

Frank GM0CSZ / KN6WH

2482. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 10:17:56 UTC
From: Derek <blueyhi5s@yahoo.com.au>
Message-ID: <1192789076.614975.213220@z24g2000prh.googlegroups.com>
Source record: 35314

On Oct 19, 6:28 am, "Richard Fry" <r...@adams.net> wrote:

snip
>
> \\ Enthusiasm is always good, but if it was possible to do what you outline
> using the radiation possible on 160 m solely from a structure in the shape
> of a 4 ft cube, IMO it would have been done long ago.
>
> Some very experienced antenna engineers including George Brown of RCA,
> Carl E. Smith, John Kraus, C. Balanis and many others have investigated this
> subject over the last 60-70 years, and have concluded that nothing smaller
> is as effective on MW as a linear, vertical monopole at least 1/4-wave high,
> using a good r-f gound

Hi Richard

so you are saying that as all the afore mentioned came to the same
conclusion, there is no possibility they were 'all' wrong?, if that is
the case then all is known and there is no point in trying to prove
otherwise as there is nothing left to learn.
I think not.

Derek

2483. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 10:55:30 UTC
From: Dave <noone@nowhere.com>
Message-ID: <C20Si.10156$I22.385@trndny03>
Source record: 35315

"art" <aunwin@insightbb.com> wrote in message
news:1192752266.341085.215020@v23g2000prn.googlegroups.com...
> Pseudo experts of fractional wavelength antennas.
> Where does the current flow when it reaches the END of a fractional
> length?
> verticle antenna and why?
> How does this relate to the term "end effect"?
> If you have already written a book then tell us what the auther said.
> Art KB9MZ.....XG
>

it turns around and goes right back down the way it came.

2484. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 13:19:32 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192799972.400297.64450@q5g2000prf.googlegroups.com>
Source record: 35316

On 19 Oct, 03:55, "Dave" <no...@nowhere.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1192752266.341085.215020@v23g2000prn.googlegroups.com...
>
> > > Pseudo experts of fractional wavelength antennas.
> > > Where does the current flow when it reaches the END of a fractional
> > > length?
> > > verticle antenna and why?
> > > How does this relate to the term "end effect"?
> > > If you have already written a book then tell us what the auther said.
> > > Art KB9MZ.....XG
>
> it turns around and goes right back down the way it came.

So a electrical generater doesn't keep turning in one direction
but instead it occillates at the desired frequency.
I have never seen one do that!
And "end effect" is the confusion created at the top of the radiator

2485. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 13:27:04 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <ffabbd$97v$1@aioe.org>
Source record: 35317

"Derek" wrote
> so you are saying that as all the afore mentioned came to the same
> conclusion, there is no possibility they were 'all' wrong?, if that is
> the case then all is known and there is no point in trying to prove
> otherwise as there is nothing left to learn. I think not.

The fundamentals of EM radiation are defined by natural laws, which even 50 years ago were rather well understood.

New antenna designs always will be possible, but all of them of necessity must be based on, and follow natural law.

RF

2486. Re: Antenna book

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 13:29:28 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1192800568.837632.131010@e34g2000pro.googlegroups.com>
Source record: 35318

On Oct 13, 3:57 am, Dave <somepl...@nowhere-nice.com> wrote:
> JIMMIE wrote:
> > My wife picked up a book at a yard sale today for $1. Handbook of
> > Antenna Design by Rudge. I havnt had a chance to check it out yet, is
> > this a good book.
>
> > Jimmie
>
> I don't know the book, but there is a two volume set (one orange, one
> blue) by Rudge, Milne, Olver and Knight. Those are professional level
> antenna books. I suspect it is the same Rudge.
>
> If yours is similar, I would think it is a steal at $1. Professional
> level antenna books can be very expensive.
>
> My background is quite close to their target audance - I did an MSc
> degree in "Microwaves and Optoelectronics", and one of the options I
> took during that MSc was "Antennas and Radar".
>
> Yet I'm the first to admit, I find the theory in these sort of books
> very hard at times. (I think having a maths degree might help, which I
> do not have).
>
> G8WRB

I was working on my EE degree when I got a job offer I couldnt turn
down. I was about a year short of getting the degree and had intended
to get it after I got settled in my new job. That never happened,
instead I work on radars, comm systems and old 60s vintage mainframe
computers and raising a family. My EE counterparts get to shuffle
paperwork all day. Im sure I would get more outof the books too if I
wnet back and finished my degree, at least took a couple mre calculus
courses

2487. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 13:45:12 UTC
From: Dave <noone@nowhere.com>
Message-ID: <Ix2Si.3834$GM2.2949@trndny02>
Source record: 35319

"art" <aunwin@insightbb.com> wrote in message
news:1192799972.400297.64450@q5g2000prf.googlegroups.com...
> On 19 Oct, 03:55, "Dave" <no...@nowhere.com> wrote:
>> "art" <aun...@insightbb.com> wrote in message
>>
>> news:1192752266.341085.215020@v23g2000prn.googlegroups.com...
>>
>> > Pseudo experts of fractional wavelength antennas.
>> > Where does the current flow when it reaches the END of a fractional
>> > length?
>> > verticle antenna and why?
>> > How does this relate to the term "end effect"?
>> > If you have already written a book then tell us what the auther said.
>> > Art KB9MZ.....XG
>>
>> it turns around and goes right back down the way it came.
>
> So a electrical generater doesn't keep turning in one direction
> but instead it occillates at the desired frequency.
> I have never seen one do that!
> And "end effect" is the confusion created at the top of the radiator
>

'end effect' is an effect of the capacitance seen from the end of the
antenna to ground or the other part of a dipole.

how does a generator come into this? you feed current into a wire with an
open end, it gets to the end, reverses direction and goes back to where it
started. no frequency was stated or implied all you asked was where there
'current' went... that could be any kind of current including a step or
pulse or sinusoids of any frequency.

2488. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 13:52:08 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <ffacqddco1@aioe.org>
Source record: 35320

"art" wrote
> And "end effect" is the confusion created
> at the top of the radiator

Those wanting a more accurate description can find it here...

http://books.google.com/books?id=U-3yUu-M9s0C&pg=PA1258&dq=antenna+end+effect&sig=2Agkr98vD-G-Vn8RnFgaJ57mgyo

RF

2489. k9ay loop

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 14:20:11 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <vKadnSnbDoaPIIXanZ2dnUVZ_gednZ2d@adelphia.com>
Source record: 35321

Is this antenna only for RECEIVING, or could it be used for Xmitting as well??

73's

2490. Re: k9ay loop

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 14:45:23 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <_6GdnTzq0eF2X4XanZ2dnUVZ8s2mnZ2d@bt.com>
Source record: 35322

"John Doe" <hgorden@adelphia.net> wrote in message
news:vKadnSnbDoaPIIXanZ2dnUVZ_gednZ2d@adelphia.com...
> Is this antenna only for RECEIVING, or could it be used for Xmitting as
> well??
>
> 73's
>
>
John

This antenna is best used for receiving. While it could be used for transmitting, the losses through the matching and switching networks mean that other designs are more efficient at radiating a signal.

For example, ferrite rods make great compact receiving antennas, but are practically useless for transmitting. Just because you have a great receiving antenna, it doesn't mean that it will transmit equally well.

Mike G0ULI

2491. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 15:17:17 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192807037.368525.200470@i13g2000prf.googlegroups.com>
Source record: 35323

On 19 Oct, 06:45, "Dave" <no...@nowhere.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1192799972.400297.64450@q5g2000prf.googlegroups.com...
>
>
>
>
>
> > On 19 Oct, 03:55, "Dave" <no...@nowhere.com> wrote:
> >> "art" <aun...@insightbb.com> wrote in message
>
> >>news:1192752266.341085.215020@v23g2000prn.googlegroups.com...
>
> >> > Pseudo experts of fractional wavelength antennas.
> >> > Where does the current flow when it reaches the END of a fractional
> >> > length?
> >> > verticle antenna and why?
> >> > How does this relate to the term "end effect"?
> >> > If you have already written a book then tell us what the auther said.
> >> > Art KB9MZ.....XG
>
> >> it turns around and goes right back down the way it came.
>
> > So a electrical generater doesn't keep turning in one direction
> > but instead it occillates at the desired frequency.
> > I have never seen one do that!
> > And "end effect" is the confusion created at the top of the radiator
>
> 'end effect' is an effect of the capacitance seen from the end of the
> antenna to ground or the other part of a dipole.
>
> how does a generator come into this? you feed current into a wire with an
> open end, it gets to the end, reverses direction and goes back to where it
> started. no frequency was stated or implied all you asked was where there
> 'current' went... that could be any kind of current including a step or
> pulse or sinusoids of any frequency.- Hide quoted text -
>
> - Show quoted text -

The current comes from a generator does it not? So how is that current
produced?
I see a generator turning in one direction only all the time where you
are suggesting that it is occillating.

Pretty hard to draw a circuit if it tracks back the way it came.
Draw a graph of an occillating current as you would see on a scope
that shows two degrees of freedom.
Does the "x" direction stop after a half cycle?

2492. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 15:38:22 UTC
From: Tom Horne <hornetd@veriqrmzon.net>
Message-ID: <Ob4Si.6$_64.2@trnddc02>
Source record: 35324

art wrote:
> On 19 Oct, 03:55, "Dave" <no...@nowhere.com> wrote:
>> "art" <aun...@insightbb.com> wrote in message
>>
>> news:1192752266.341085.215020@v23g2000prn.googlegroups.com...
>>
>>> Pseudo experts of fractional wavelength antennas.
>>> Where does the current flow when it reaches the END of a fractional
>>> length?
>>> verticle antenna and why?
>>> How does this relate to the term "end effect"?
>>> If you have already written a book then tell us what the auther said.
>>> Art KB9MZ.....XG
>> it turns around and goes right back down the way it came.
>
> So a electrical generater doesn't keep turning in one direction
> but instead it occillates at the desired frequency.
> I have never seen one do that!
> And "end effect" is the confusion created at the top of the radiator
>

I don't have to be an engineer to question this one. An electrical
"generator" does indeed keep turning in a single direction. It has
brushes and split commutator rings to keep the current flowing in only
one direction. That is in the very nature of a "generator." The device
I suspect that you are alluding to is an "alternator" in which a
magnetic field is rotated through a coil of wire and passes through both
halves of the coil at the same time. Since in a well designed, single
phase alternator the center of the magnetic field and the center of the
coil of wire are coincident the current does indeed alternate because
unlike a generator the alternator does not include any means of flopping
the connections on the coil in time with the magnetic field. So as the
negative and positive fields of the magnet pass through each half of the
coil of wire in turn the current reverses direction.
--
Tom Horne, W3TDH

2493. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 16:04:04 UTC
From: richardharrison@webtv.net
Message-ID: <28673-4718D574-104@storefull-3253.bay.webtv.net>
Source record: 35325

Art wrote:
"And "end effect" is the confusion created at the top of the radiator."

When the signal arrives at the open circuit end of the antenna, current can not continue its forward flow. It abruptly stops, no longer producing a magnetic field.

Energy from the magnetic field is converted to energy in the electric field for an instant (Cecil`s famous conservation of energy). This produces an insreased voltage at the open circuit end. This incresed voltage has more capacitive effect, akin to the "Miller effect" caused by the higher signal voltage on the plate of an amplifier vacuum tube than on its grid.

On a transmission line or on an antenna system, we used to call this capacitive action the "Ferranti effect"

Best regards, Richard Harrison, KB5WZI

2494. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 17:24:19 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1192814659.558401.306700@y27g2000pre.googlegroups.com>
Source record: 35326

On Oct 19, 6:52 am, "Richard Fry" <r...@adams.net> wrote:
> "art" wrote> And "end effect" is the confusion created
> > at the top of the radiator
>
> ____________
>
> Those wanting a more accurate description can find it here...
>
> http://books.google.com/books?id=U-3yUu-M9s0C&pg=PA1258&dq=antenna+en...
>
> RF

Thanks, Richard. I notice that article references King, I assume
Ronold W. P. King, who wrote some very nice qualitative explanations
of various linear and loop antennas in King, Mimno and Wing's
"Transmission Lines, Antennas and Waveguides."

There's also a nice explanation that I feel is quite accurate in
Joseph Boyer's "The Antenna--Transmission Line Analog," from Ham Radio
magazine, April and May 1977. I believe I have it somewhere as a PDF,
scanned from the article.

Cheers,
Tom

2495. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 17:43:16 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192815796.584263.262800@i38g2000prf.googlegroups.com>
Source record: 35327

On 19 Oct, 09:04, richardharri...@webtv.net (Richard Harrison) wrote:
> Art wrote:
>
> "And "end effect" is the confusion created at the top of the radiator."
I was carrying on the train of thought of the poster, I have made it
quite clear what my thoughts are.
>
> When the signal arrives at the open circuit end of the antenna, current
> can not continue its forward flow. It abruptly stops, no longer
> producing a magnetic field.

Who says so? I suspect that in the recognition of a measurement
problem
you theorised what might have , could have etc to match your faulty
logic.

.

>
> Energy from the magnetic field is converted to energy in the electric
> field for an instant (Cecil`s famous conservation of energy). This
> produces an insreased voltage at the open circuit end. This incresed
> voltage has more capacitive effect, akin to the "Miller effect" caused
> by the higher signal voltage on the plate of an amplifier vacuum tube
> than on its grid.

All this is faulty logic manufactured to suit your intelligence.
Radiation is a function of the release of energy from capacitance and
inductance
during a cycle i.e. a parallel circuit called a "tank circuit: which
can also
be seen as a loss less system ala a pendulum.
This goes back to what I say about books. Anybody can write one. It is
up
to the reader to follow the dots of logic displayed to determine
agreement
not to swallow it and memorise it.

>
> On a transmission line or on an antenna system, we used to call this
> capacitive action the "Ferranti effect"
>
> Best regards, Richard Harrison, KB5WZI

2496. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 18:43:35 UTC
From: richardharrison@webtv.net
Message-ID: <28673-4718FAD7-161@storefull-3253.bay.webtv.net>
Source record: 35328

Art wrote:
"Who says so?"

Many. It is commonly held opinion.

Frederick Emmons Terman writes on page 89 of his 1955 opus:

"When the load impedance is infinite, Eq. (4-14) shows that that the coeficient of reflection will be 1 on an angle of 0. Under these conditions the incident and reflected waves will have equal magnitudes at the load, and the reflection will be such that the voltages of the incident and reflected waves have the same phase. As a result, the voltages of the two waves add mathematically so that at the load E1=E2+EL/2.

Best regards, Richard Harrison, KB5WZI

2497. Re: Ferrite Chokes: What is the maximum impedance that can be obtained?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 19:12:22 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13hi0cmnj7lj58e@corp.supernews.com>
Source record: 35329

Highland Ham wrote:
> Roy Lewallen wrote:
>> Good advice. In antenna applications, we need to strive to keep the
>> flux density low enough that ferrites behave essentially linearly. If
>> we don't, harmonic generation will result.
> ============================
> A question : Is the above the reason why current baluns wound on a
> ferrite toroid with ,say, a total of 10 windings , can be best made by
> having 5 windings wound in 1 direction and the other 5 in the opposite
> direction ?

No.

You probably mean "regressive" winding, where you wind half the turns, cross the wire to the other side of the core, and wind the remaining turns in the other direction (but the same sense) around the core. If you wind half the turns in each sense (half where you pass the wire downward through the center of the core each turn and half where you pass it upward), you'll end up with nearly zero impedance and a very poor balun.

The advantage of the "regressive" winding technique is that it reduces the end-to-end capacitance of the winding. I've found that with high Q inductors (but ones operating well below self resonance) it typically improves the Q by around 10 - 15% or so, which is usually not worth the trouble. With the sorts of ferrites commonly used for baluns, Q is typically one or less over the operating frequency range, so "regressive" winding makes no difference at all. In any case, it makes no difference in core flux density.

Roy Lewallen, W7EL

2498. patent application rules

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 19:39:38 UTC
From: David George Johnson <ercoupe@direcway.com>
Message-ID: <t51ih3d8fett11ms83hih03lu61qamjjk9@4ax.com>
Source record: 35331

On Thu, 18 Oct 2007 18:51:48 -0700, art <aunwin@insightbb.com> wrote:

>In reading up on the new rules for patent continuations and cost
>changes e.t.c.
>I decided to review patents applied lately for antennas.
>To my surprise I could not find any new listing of a patent request on
>antennas from private entities.
>Applications listed were only those that had transferred direct
>authority in dealing with the patent office

All the transfer of direct authority means is that the inventor has hired an attorney. The fact that an individual hires a patent attorney to help them prepare the application doesn't mean they are not an individual inventor working by themselves out of their basement. Its just that the USPTO web page does not have a separate search criteria for applications where the inventor is acting "pro se", that is, without the help of an attorney.

>Now I know personally that there are patents applied for by the
>inventors themselves so why are they kept secret
>from the public at large?

All patent applications are published 18 months after their filing date. This rule was enacted about ten years ago to comply with the provisions of the GATT treaty, whch simply made USA practice compatible with what the rest of the world had been doing for decades.

I am guessing but I can only assume that a
>private claim can obtain authority
>to change content later with the examiners assistance where-as others
>cannot.

If you look at the USPTO web page under the "Public Pair" heading (its under the general "Patents" subcategory), you can view the actual file contents of every application 18 months after filing. This includes the original application and claims as filed -- not just the content, but a scan of the actual document that was filed.

If so this can affect the new continuance rulings immensly.

The problem with the old continuation rules was that there was no penalty for filing infinte continuation applications. Now if you file a third one you have to convince the USPTO that it is appropriate. I suspect that the new rules will be successful in discouraging excessive continuation filings.

>Vincent got his antenna continuance claims in just about a month
>before the rules changed. Rules have also been revised on the
>substance of claims presumably to retard the increasing number of
>counter claims tho no doubt it will open more paths to circumvent
>existing patents. Just like politics, the more you revise policy the
>more you increase loopholes and the more money exchanges hands between
>those who introduce "corrective" additions. Some fees have gone up by
>3% which is rare considering present social security increases so the
>PTO at Crystal City is being really genourous

Its not a cost of living raise -- its based on the previous year's
actual expenditures. Some years the fees actually go down.

>Art Unwin KB9MZ......xg

2499. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 19:41:40 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192822900.489633.176450@i13g2000prf.googlegroups.com>
Source record: 35330

On 19 Oct, 11:43, richardharri...@webtv.net (Richard Harrison) wrote:
> Art wrote:
>
> "Who says so?"
>
> Many. It is commonly held opinion.
Right, it is opinion not factual.
There is no proof what so ever that is what happens.
So you must also consider alernatives.
Current can go out into space which doesn't seem plausible
Current can flow inside the copper wire which is plausible

So now we have a measurement problem. How can we track
one path from the other or you come up with a reason
that it can't flow thru the center of copper

>
> Frederick Emmons Terman writes on page 89 of his 1955 opus:
>
> "When the load impedance is infinite,

WELL,WELL,WELL!

Probably true except for one thing.... THE LOAD IMPEDANCE IS NOT
INFINITE !
See what I mean about books. It is not a case of remembering what
somebody
said it is a case of connecting the dots with good logic that one
finds
unmistakable agreement.
Which brings up another point with respect to radiation about which
many admit is not known.
If the laws of Maxwell are in agreement with the extension of Gauss
which many say
of the latter is not correct then logic states we should remove
Maxwell.
Problem is that computor programs based on Maxwell laws also confirm
Gaussian law.
So now YOU connect the dots. Maxwell is correct? Computor programs
based on Maxwell
are correct. Computor programs confirm Gausses law extensions re
adding a time varying field.
Mathematics support Gaussian verification of Gaussion law, so
where is the logic of condemming Gaussian law and yet not condemming
all other laws?

Lesson: Use your own logic before referring what you read to memory
otherwise
you are just a member of the herd without a contribution of your own.
Just follow the arse of who goes before youand ignor the smell
Art

Eq. (4-14) shows that that the
> coeficient of reflection will be 1 on an angle of 0. Under these
> conditions the incident and reflected waves will have equal magnitudes
> at the load, and the reflection will be such that the voltages of the
> incident and reflected waves have the same phase. As a result, the
> voltages of the two waves add mathematically so that at the load
> E1=E2+EL/2.

Meaningless jabber since it is based on "infinite impedance" which is
in error.
thus the analysis is in error for the circumstances at hand.

>
> Best regards, Richard Harrison, KB5WZI

2500. Re: New patent application rules

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 20:04:37 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <ffb310$d7v$1@news.service.uci.edu>
Source record: 35332

art wrote:
> In reading up on the new rules for patent continuations and cost
> changes e.t.c.
> I decided to review patents applied lately for antennas.
> To my surprise I could not find any new listing of a patent request on
> antennas from private entities.

They're there. I found one in the first 3 I looked at.

> Applications listed were only those that had transferred direct
> authority in dealing with the patent office

That's not the case. It's not surprising to me that most of the
applications are on behalf of companies that sell things.

> Now I know personally that there are patents applied for by the
> inventors themselves so why are they kept secret

You might need to improve your search techniques.

> from the public at large? I am guessing but I can only assume that a
> private claim can obtain authority
> to change content later with the examiners assistance where-as others
> cannot.

You can change the content, but not the substance of a claim.

> If so this can affect the new continuance rulings immensly.

The new (proposed) rules simply require that an explanation be
provided as to why the ammended information had not been included in
earlier submissions.

> Rules have also been revised on the
> substance of claims presumably to retard the increasing number of
> counter claims tho no doubt it will open more paths to circumvent
> existing patents.

The only change being _proposed_ is one where the initial examination
of the application would be of just the independent claims and any
dependent claims the applicant cites in particular.

Congrats on your upgrade, Art.

73, ac6xg

2501. Re: Ferrite Chokes: What is the maximum impedance that can be obtained?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 20:23:02 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99CF40E48822Cnonenowhere@61.9.191.5>
Source record: 35333

Roy Lewallen <w7el@eznec.com> wrote in
news:13hi0cmnj7lj58e@corp.supernews.com:

...
> The advantage of the "regressive" winding technique is that it reduces
> the end-to-end capacitance of the winding. I've found that with high Q
> inductors (but ones operating well below self resonance) it typically
> improves the Q by around 10 - 15% or so, which is usually not worth the
> trouble. With the sorts of ferrites commonly used for baluns, Q is
> typically one or less over the operating frequency range, so
> "regressive" winding makes no difference at all. In any case, it makes
> no difference in core flux density.
...

Another advantage is that it may be convenient to have the winding end on opposite sides of the core... often the case for fitting a balun to a box with input on one side and output on the other.

Owen

2502. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 20:34:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ffb4cb$5hl$1@news.albasani.net>
Source record: 35334

John Smith I wrote:
>> ...

This:

"Ambient Corporation (ABTG) closed today at $0.042 with 420,400 shares traded. Ambient Corporation engages in the design, development, commercialization, and marketing of broadband over power lines (BPL) equipment, technologies, and services, recently announced received an addition to its grant of BPL Equipment Authorization from the Federal Communications Commission (FCC), which increases Ambient's flexibility in network design, by allowing the company to utilize both Ambient inductive couplers and Arteche capacitive couplers on medium voltage electrical distribution lines."

From here:

http://www.transworldnews.com/NewsStory.aspx?id=25695&cat=1

Regards,
JS

2503. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 20:35:19 UTC
From: richardharrison@webtv.net
Message-ID: <28646-47191507-13@storefull-3255.bay.webtv.net>
Source record: 35335

Art wrote:
"THE LOAD IMPEDANCE IS NOT INFINITE!"

Relative to the impedance of a reasonable antenna. the impedance of the atmosphere or the impedance of free-space is non-conductive.
When the signal following the conductive surface of an antenna reaches its end of the conductive path, current reverses its direction of travel of necessity.

Best regards, Richard Harrison, KB5WZI

2504. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 20:52:42 UTC
From: richardharrison@webtv.net
Message-ID: <28644-4719191A-119@storefull-3255.bay.webtv.net>
Source record: 35337

I mistyped: E1=E2+EL/2

The + sign should have been an = sign. I didn`t remove my finger from
the dhift register in time and the wrong character emerged (a + instead
of the = sign). I am sorry. It should have read:

E1=E2=EL/2 because EL is the sum of E1 and E2 which are equal.

Best regards, Richard Harrison, KB5WZI

2505. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 20:53:00 UTC
From: Dave <noone@nowhere.com>
Message-ID: <MO8Si.17$Qj3.11@trndny01>
Source record: 35336

"art" <aunwin@insightbb.com> wrote in message
news:1192807037.368525.200470@i13g2000prf.googlegroups.com...
> On 19 Oct, 06:45, "Dave" <no...@nowhere.com> wrote:
>> "art" <aun...@insightbb.com> wrote in message
>>
>> news:1192799972.400297.64450@q5g2000prf.googlegroups.com...
>>
>>
>>
>>
>>
>> > On 19 Oct, 03:55, "Dave" <no...@nowhere.com> wrote:
>> >> "art" <aun...@insightbb.com> wrote in message
>> >>
>> >>news:1192752266.341085.215020@v23g2000prn.googlegroups.com...
>> >>
>> >> > Pseudo experts of fractional wavelength antennas.
>> >> > Where does the current flow when it reaches the END of a fractional
>> >> > length?
>> >> > verticle antenna and why?
>> >> > How does this relate to the term "end effect"?
>> >> > If you have already written a book then tell us what the auther
>> >> > said.
>> >> > Art KB9MZ.....XG
>> >>
>> >> it turns around and goes right back down the way it came.
>> >>
>> > So a electrical generater doesn't keep turning in one direction
>> > but instead it occillates at the desired frequency.
>> > I have never seen one do that!
>> > And "end effect" is the confusion created at the top of the radiator
>>
>> 'end effect' is an effect of the capacitance seen from the end of the
>> antenna to ground or the other part of a dipole.
>>
>> how does a generator come into this? you feed current into a wire with
>> an
>> open end, it gets to the end, reverses direction and goes back to where
>> it
>> started. no frequency was stated or implied all you asked was where
>> there
>> 'current' went... that could be any kind of current including a step or
>> pulse or sinusoids of any frequency.- Hide quoted text -
>>

>> - Show quoted text -
>
> The current comes from a generator does it not? So how is that current
> produced?
> I see a generator turning in one direction only all the time where you
> are suggesting that it is occillating.
> Pretty hard to draw a circuit if it tracks back the way it came.
> Draw a graph of an occillating current as you would see on a scope
> that shows two degrees of freedom.
> Does the "x" direction stop after a half cycle?
>
i don't need a generator to create a current. hook a battery to a piece of wire, watch the current travel to the end of the wire then reflect back. its easy to do the measurements and they match exactly the theory. i use this all the time, its called a time domain reflectometer. very handy for finding breaks or bad spots in feed lines or Beverage antennas. use one for a while and you will become much more familiar with the true effect of currents on wires and reflections.

2506. Re: New patent application rules

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 21:27:02 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192829222.420137.236430@v29g2000prd.googlegroups.com>
Source record: 35338

On 19 Oct, 13:04, Jim Kelley <jwkel...@uci.edu> wrote:
> art wrote:
> > In reading up on the new rules for patent continuations and cost
> > changes e.t.c.
> > I decided to review patents applied lately for antennas.
> > To my surprise I could not find any new listing of a patent request on
> > antennas from private entities.
>
> They're there. I found one in the first 3 I looked at.

Well bully for you, I was looking for one in particular, a heading
that is and I couldn't find,google it
>
> > Applications listed were only those that had transferred direct
> > authority in dealing with the patent office
>
> That's not the case. It's not surprising to me that most of the
> applications are on behalf of companies that sell things.
>
> > Now I know personally that there are patents applied for by the
> > inventors themselves so why are they kept secret
>
> You might need to improve your search techniques.

Probably so. I had the number and put it in google and it couldn't
find it.
I thought the headings were entered within two months which is what I
found
to reflect the search.

>
> > from the public at large? I am guessing but I can only assume that a
> > private claim can obtain authority
> > to change content later with the examiners assistance where-as others
> > cannot.
>
> You can change the content, but not the substance of a claim.
>
> > If so this can affect the new continuance rulings immensly.

The important point here is the examiner has the authority to make
changes to the substance and the claims when asked for assistance
from a private entity during the examination without having to
ask for an extended contunuance (I believe that is how it is)
I have made changes in every area with the consent of the examiner

and his superior. Law demands that they supply assistance to any
private entity

>
> The new (proposed) rules simply require that an explanation be
> provided as to why the ammended information had not been included in
> earlier submissions.
Does he have to get a new starting date plus additional costs
because of the attorneys poor performance?

>
> > Rules have also been revised on the
> > substance of claims presumably to retard the increasing number of
> > counter claims tho no doubt it will open more paths to circumvent
> > existing patents.
>
> The only change being _proposed_ is one where the initial examination
> of the application would be of just the independent claims and any
> dependent claims the applicant cites in particular.

You cant claim anything that is not specifically mentioned in the body
>
> Congrats on your upgrade, Art.
If you say so
>
> 73, ac6xg

2507. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 21:31:45 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <6n9Si.3088$LD2.2907@newssvr17.news.prodigy.net>
Source record: 35339

Richard Harrison wrote:
> Relative to the impedance of a reasonable antenna. the impedance of the
> atmosphere or the impedance of free-space is non-conductive.
> When the signal following the conductive surface of an antenna reaches
> its end of the conductive path, current reverses its direction of travel
> of necessity.

Maybe better understood using visible EM waves.
When the medium's index of refraction changes,
reflections are the result. One can learn a
lot about EM wave reflection by looking in a
mirror. With some of the strange concepts about
EM reflected energy that exist on this newsgroup,
it is a wonder how the promoters of such concepts
can look themselves in the mirror. :-)
--
73, Cecil http://www.w5dxp.com

2508. Re: New patent application rules

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 21:58:10 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <ffb9m4jsa1@news.service.uci.edu>
Source record: 35340

art wrote:

> I was looking for one in particular, a heading
> that is and I couldn't find,google it

Use this one, Art:

http://www.uspto.gov/patft/index.html

73, ac6xg

2509. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 22:16:05 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <ffbano$l3h$1@news.service.uci.edu>
Source record: 35241

John Smith wrote:

> John Smith I wrote:
> >> ...
> >
> This:
> >
> "Ambient Corporation (ABTG) closed today at $0.042 with 420,400 shares
> traded. Ambient Corporation engages in the design, development,
> commercialization, and marketing of broadband over power lines (BPL)
> equipment, technologies, and services, recently announced received an
> addition to its grant of BPL Equipment Authorization from the Federal
> Communications Commission (FCC), which increases Ambient's flexibility
> in network design, by allowing the company to utilize both Ambient
> inductive couplers and Arteche capacitive couplers on medium voltage
> electrical distribution lines."
> >
> From here:
> >
> http://www.transworldnews.com/NewsStory.aspx?id=25695&cat=1
> >
> Regards,
> JS

Try posting to misc.invest.stocks

Maybe somebody over there will have a use for this information.

ac6xg

2510. Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 22:59:18 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <yZ6dndiaQLshq4TanZ2dnUVZ_qqgnZ2d@adelphia.com>
Source record: 35242

I am looking for the construction article "FRACTAL Antenna for 10m" that appeared sometime ago in I think either QST, Ham Radio, or 73 magazines.

I have a lot of spare time on my hands - so I thought I would like to construct one and use it portable as I live in a Antenna Restricted Community.

73's

2511. Re: Ferrite Chokes: What is the maximum impedance that can be obtained?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-19 23:56:01 UTC
From: Mark <makolber@yahoo.com>
Message-ID: <1192838161.116604.81000@e9g2000prf.googlegroups.com>
Source record: 35243

On Oct 19, 4:12 am, Roy Lewallen <w...@eznec.com> wrote:
> Wimpie wrote:
>
> > So you will end up with a high Z transmission line with significantly
> > lower propagation speed. A difficulty is: where is the return
> > conductor? You can assume the return conductor about 0.125 lambda
> > away when the influence of the ferrite is not that large. Very close
> > to the feedpoint, the impedance of the ferrite loaded line is strongly
> > dependent on the distance from the feedpoint.
> > . . .
>
> The second conductor of the transmission line is the ground plane.
>
> > When you would take a long thick ferrite tube, the field will even not
> > come out of the ferrite because of the attenuation in combination with
> > the low EM wave propagation speed inside the ferrite. Ferrite
> > absorbing tiles also make use of both the epsilon.r and permeability.
>
> > So finally I did not answer your question about how to determine the
> > feedpoint impedance. Probably you will need full 3D EM software that
> > can handle 3D structures of different mu and eps. As far as I know,
> > all momentum based EM software cannot handle this.
>
> I don't believe that's necessary. As you say, the field doesn't escape
> the ferrite. This means that the E field between transmission line
> conductors (the whip and ground plane) is zero. Therefore, the impedance
> of the line (E/H) is infinite. The loss of the ferrite is adequate to
> suppress any reflections from the end of the line. A reflectionless,
> infinite impedance line will have an infinite input impedance. This is,
> as it should be, the same result I got from a somewhat different
> perspective.
>
> Roy Lewallen, W7EL

Thanks for the replies..

so I think you are saying that the 19" wire inside a 19" tube of
ferrite will present a Hi Z a the base and will therefore consume
little power i.e. it looks like an open circuit...

Does that seem resonable to you? It's the the same result as if the
ferrite were copper. i.e a cavity resonantor. I know the answer is
correct for copper but copper is not lossy.

>From the other perspective, the ferrite is lossy so it will be absorbing energy and dissipating heat and therefore the base must look like SOME impedance that has an R comonent.

So I think the more fundamenal nature of my questoin is about how a wire radiates in concert with the return current to the ground plane. What if the wire is surrounded by a lossy medium such that the field is greatly attenuated before it can get to the ground. How does the return current flow and how does energy get absorbed by the lossy medium?

Mark

2512. Re: New patent application rules

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 00:37:16 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192840636.235108.48560@v29g2000prd.googlegroups.com>
Source record: 35244

On 19 Oct, 14:58, Jim Kelley <jwkel...@uci.edu> wrote:
> art wrote:
> > I was looking for one in particular, a heading
> > that is and I couldn't find,google it
>
> Use this one, Art:
>
> http://www.uspto.gov/patft/index.html
>
> 73, ac6xg

The problem I have is that a patent request was submitted
as most people know, on the Gaussian antennas. Now with my
present experiments comming to and end(I have a directional
circularly polarised antenna for 160 M which is wound on
2 foot diameter with a lesser dimensional width which is probably
a first, plus I have it placed inside a capacitive field)
there are more additions to be made. Maybe instead of filing a
fresh patent it would have been cheaper to ask for a continuance
on the first request, a rule that I was unaware of. Still once the
money
fees have been payed it probably would be to difficult to reverse
payment
and try for a continuance. Maybe it is best to let a sleeping dog to
lie.
Regards
Art

2513. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 00:44:37 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192841077.983672.153470@q3g2000prf.googlegroups.com>
Source record: 35245

On 19 Oct, 14:31, Cecil Moore <nos...@w5dxp.com> wrote:
> Richard Harrison wrote:
> > Relative to the impedance of a reasonable antenna. the impedance of the
> > atmosphere or the impedance of free-space is non-conductive.
> > When the signal following the conductive surface of an antenna reaches
> > its end of the conductive path, current reverses its direction of travel
> > of necessity.
>
> Maybe better understood using visible EM waves.
> When the medium's index of refraction changes,
> reflections are the result. One can learn a
> lot about EM wave reflection by looking in a
> mirror. With some of the strange concepts about
> EM reflected energy that exist on this newsgroup,
> it is a wonder how the promoters of such concepts
> can look themselves in the mirror. :-)
> --
> 73, Cecil http://www.w5dxp.com

Probably true. I wonder if they would continue
to argue if the 1/4 wave antenna was tubular or is
there another reason that the center of a radiator
is off limits to current flow.
Still you can't blame them if all they know comes
from the ARRL books. After all it is a hobby and in
the early days many did not have the opportunity
for a college education
Best regards
Art

2514. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 01:12:44 UTC
From: Derek <blueyhi5s@yahoo.com.au>
Message-ID: <1192842764.854597.176490@v29g2000prd.googlegroups.com>
Source record: 35246

On Oct 19, 9:27 pm, "Richard Fry" <r...@adams.net>

> The fundamentals of EM radiation are defined by natural laws, which even 50
> years ago were rather well understood.
>
> New antenna designs always will be possible, but all of them of necessity
> must be based on, and follow natural law.
>
> RF

Hi Richard

where is it shown that Art is not following natural
laws?. He has explained every step along the way
and I see no place where he has strayed from natural law.

Derek

2515. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 01:19:21 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192843161.682858.257530@q3g2000prf.googlegroups.com>
Source record: 35247

On 19 Oct, 13:34, John Smith <assemblywiz...@gmail.com> wrote:
> John Smith I wrote:
>
> >> ...
>
> This:
>
> "Ambient Corporation (ABTG) closed today at $0.042 with 420,400 shares
> traded. Ambient Corporation engages in the design, development,
> commercialization, and marketing of broadband over power lines (BPL)
> equipment, technologies, and services, recently announced received an
> addition to its grant of BPL Equipment Authorization from the Federal
> Communications Commission (FCC), which increases Ambient's flexibility
> in network design, by allowing the company to utilize both Ambient
> inductive couplers and Arteche capacitive couplers on medium voltage
> electrical distribution lines."
>
> From here:
>
> http://www.transworldnews.com/NewsStory.aspx?id=25695&cat=1
>
> Regards,
> JS

John, they haven't changed the basic rules! So a company asks if they
can use this or that
and the FCC comes back with a couldn't care less what they use to meet
the existing rules.
So the company now has the liberty to say it has got permission from
the FCC insinuating
but not stating, that a major advance has been made in the industry
at large.
It would appeared so much different if they asked permission to lock
the doors after work every day
and got the same response but that would not have affected the trade
in shares would it?
Regards
Art

2516. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 01:31:13 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <47195a60$0$32493$4c368faf@roadrunner.com>
Source record: 35248

"John Doe" <hgorden@adelphia.net> wrote in message
news:yZ6dndiaQLshq4TanZ2dnUVZ_qqgnZ2d@adelphia.com...
>I am looking for the construction article "FRACTAL Antenna for 10m" that
>appeared sometime ago in I think either QST, Ham Radio, or 73 magazines.
>
> I have a lot of spare time on my hands - so I thought I would like to
> construct one and use it portable as I live in a Antenna Restricted
> Community.
>
> 73's

John, there is no such thing as a fractal antenna. Antennas can only
function in real space-time. It is a only figment of certain matematicians'
imaginations. Sorry. 73

2517. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 01:33:20 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192844000.468111.233620@i38g2000prf.googlegroups.com>
Source record: 35249

On 19 Oct, 13:35, richardharri...@webtv.net (Richard Harrison) wrote:
> Art wrote:
>
> "THE LOAD IMPEDANCE IS NOT INFINITE!"
>
> Relative to the impedance of a reasonable antenna. the impedance of the
> atmosphere or the impedance of free-space is non-conductive.
> When the signal following the conductive surface of an antenna reaches
> its end of the conductive path, current reverses its direction of travel
> of necessity.
>
> Best regards, Richard Harrison, KB5WZI

Keep to the discussion at hand. The route to free space was discarded
but there is another route available which you choose to ignore,
Well not you since you just quote from books without personal
voutching.
So let us say Terman chose to ignore or his secretary screwed up.
Unless ofcourse you have dotted the I's and T,s for yourself
and can personally confirm the corectness of what you have quoted.
So pray tell me, what is the impedance of current flow on the inside
of a tube
or down the center of a solid conductor assuming there is no 10 foot
fence placed at the top end of a fractional wave length antenna.
We will leave the lights on for the current to see the inside of the
tube

2518. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 01:37:27 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192844247.807168.313400@q3g2000prf.googlegroups.com>
Source record: 35250

On 19 Oct, 13:53, "Dave" <no...@nowhere.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1192807037.368525.200470@i13g2000prf.googlegroups.com...
>
>
>
> > On 19 Oct, 06:45, "Dave" <no...@nowhere.com> wrote:
> >> "art" <aun...@insightbb.com> wrote in message
>
> >>news:1192799972.400297.64450@q5g2000prf.googlegroups.com...
>
> >> > On 19 Oct, 03:55, "Dave" <no...@nowhere.com> wrote:
> >> >> "art" <aun...@insightbb.com> wrote in message
>
> >> >>news:1192752266.341085.215020@v23g2000prn.googlegroups.com...
>
> >> >> > Pseudo experts of fractional wavelength antennas.
> >> >> > Where does the current flow when it reaches the END of a fractional
> >> >> > length?
> >> >> > verticle antenna and why?
> >> >> > How does this relate to the term "end effect"?
> >> >> > If you have already written a book then tell us what the auther
> >> >> > said.
> >> >> > Art KB9MZ.....XG
>
> >> >> it turns around and goes right back down the way it came.
>
> >> > So a electrical generater doesn't keep turning in one direction
> >> > but instead it occillates at the desired frequency.
> >> > I have never seen one do that!
> >> > And "end effect" is the confusion created at the top of the radiator
>
> >> 'end effect' is an effect of the capacitance seen from the end of the
> >> antenna to ground or the other part of a dipole.
>
> >> how does a generator come into this? you feed current into a wire with
> >> an
> >> open end, it gets to the end, reverses direction and goes back to where
> >> it
> >> started. no frequency was stated or implied all you asked was where
> >> there
> >> 'current' went... that could be any kind of current including a step or
> >> pulse or sinusoids of any frequency.- Hide quoted text -

>
> >> - Show quoted text -
>
> > The current comes from a generator does it not? So how is that current
> > produced?
> > I see a generator turning in one direction only all the time where you
> > are suggesting that it is occillating.
> > Pretty hard to draw a circuit if it tracks back the way it came.
> > Draw a graph of an occillating current as you would see on a scope
> > that shows two degrees of freedom.
> > Does the "x" direction stop after a half cycle?
>
> i don't need a generator to create a current. hook a battery to a piece of
> wire, watch the current travel to the end of the wire then reflect back.
> its easy to do the measurements and they match exactly the theory. i use
> this all the time, its called a time domain reflectometer. very handy for
> finding breaks or bad spots in feed lines or Beverage antennas. use one for
> a while and you will become much more familiar with the true effect of
> currents on wires and reflections.- Hide quoted text -
>
> - Show quoted text -

Good idea. Where can radio hams buy a battery for an a.c. frequency of
ten metres ?

2519. 80m Vertical info

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 01:39:18 UTC
From: JERD <jedunk@REMOVEbigpond.net.au>
Message-ID: <a%cSi.2069$CN4.647@news-server.bigpond.net.au>
Source record: 35251

Old timer here, (VK5JE) wanting to get back into HF. Would really appreciate pointers to web based info on build it yourself 80m vertical or dipole. Have somewhat limited real estate!

JERD

2520. Miller effect - was: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 01:55:20 UTC
From: "J. Mc Laughlin" <jcm@power-net.net>
Message-ID: <gNWdnVJgku5wwoTanZ2dnUVZ_uevnZ2d@bright.net>
Source record: 35252

Dear Group:

A hot button has been pushed. The Miller effect (not to be overly confused with the Miller theorem) stems from an exhaustive analysis of the amplification vs. frequency of very low mu triode amplifiers (the tubes available at the time). The work was published just after WW-1! It was noted that the effect on frequency response of the capacitance between grid and plate was magnified by the amplification of the stage. Miller's paper showed that the effect of the aforementioned capacitance could be approximated by a capacitor in series with a resistance with the combination placed in shunt with the grid-cathode. Several conditions need to be true that were overlooked by later commentators!

Many years latter, Miller's work became corrupted into Miller's theorem that erroneously contended that the effect of the feedback capacitor was the same as a gain dependent capacitor in shunt with the input and output of the amplifier. Various "proofs" have been published that "prove" Miller's theorem. They remind one of HS proofs involving dividing by zero.

It is true that the frequency effect of capacitance between input and output (note, those are nouns) of an amplifier is detrimentally increased as the gain of the amplifier increases. [as gain goes up - the upper half-power frequency goes down] [note the notion of approximately constant gain-bandwidth product for well behaved amplifiers]
However, the simple modeling indicated by "Miller's theorem" only occasionally estimates the relationship between feedback capacitance and upper half-power frequency. Fortunately, the allege convenience of using Miller's theorem in the slide rule days has now gone away. Today, one may use PSpice (or the like) and receive close estimates of the expected performance of an amplifier.

It is difficult for me to see gain at the end of an antenna's wire. The apparent capacitance that exists at the end of an antenna's wire simply exists and is not magnified by anything.

Lecture mode off. 73, Mac N8TT

--
J. Mc Laughlin; Michigan U.S.A.
Home: JCM@Power-Net.Net

"Richard Harrison" <richardharrison@webtv.net> wrote in message news:28673-4718D574-104@storefull-3253.bay.webtv.net...

<snip>
> Energy from the magnetic field is converted to energy in the electric
> field for an instant (Cecil`s famous conservation of energy). This

> produces an insreased voltage at the open circuit end. This incresed
> voltage has more capacitive effect, akin to the "Miller effect" caused
> by the higher signal voltage on the plate of an amplifier vacuum tube
> than on its grid.
>
<snip>

>
> Best regards, Richard Harrison, KB5WZI
>

2521. Re: New patent application rules

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 01:58:20 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192845500.925158.304310@i38g2000prf.googlegroups.com>
Source record: 35253

On 19 Oct, 14:58, Jim Kelley <jwkel...@uci.edu> wrote:
> art wrote:
> > I was looking for one in particular, a heading
> > that is and I couldn't find,google it
>
> Use this one, Art:
>
> http://www.uspto.gov/patft/index.html
>
> 73, ac6xg

This is only for "published" patent numbers, when you first
apply you are given a reference number only so future
records are kept in one place until a patent number is assigned.
Actually they are behind in their work having only one years data
that you can refer to. I do know that a private company
publishes patent headings only and are up to date within a month
and from what I see all applications list an agent.
How they get this information I do not know.
Art

2522. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 02:09:27 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192846167.348753.14790@i38g2000prf.googlegroups.com>
Source record: 35254

On 19 Oct, 18:31, "Stefan Wolfe" <ste...@eml.com> wrote:
> "John Doe" <hgor...@adelphia.net> wrote in message
>
> news:yZ6dndiaQLshq4TanZ2dnUVZ_qqgnZ2d@adelphia.com...
>
> >I am looking for the construction article "FRACTAL Antenna for 10m" that
> >appeared sometime ago in I think either QST, Ham Radio, or 73 magazines.
>
> > I have a lot of spare time on my hands - so I thought I would like to
> > construct one and use it portable as I live in a Antenna Restricted
> > Community.
>
> > 73's
>
> John, there is no such thing as a fractal antenna. Antennas can only
> function in real space-time. It is a only figment of certain matematicians'
> imaginations. Sorry. 73

Sorry.
There is a patent issued and many, many, more in the pipeline.
Look up Fractus antennas or subscribe to the quarterly industrial
magazine
called Antennas.The Fractus company was featured at the Antenna
exhibition in
Denver last month. Entrance fee was about $1000
At the companies inception it won seed money from the military
to continue their work so the antenna is viable.

2523. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 04:03:44 UTC
From: nm5k@wt.net
Message-ID: <1192853024.969367.54560@k35g2000prh.googlegroups.com>
Source record: 35255

On Oct 19, 5:17 am, Derek <blueyh...@yahoo.com.au> wrote:
> On Oct 19, 6:28 am, "Richard Fry" <r...@adams.net> wrote:
>
> snip
>
>
>
> > \\ Enthusiasm is always good, but if it was possible to do what you outline
> > using the radiation possible on 160 m solely from a structure in the shape
> > of a 4 ft cube, IMO it would have been done long ago.
>
> > Some very experienced antenna engineers including George Brown of RCA,
> > Carl E. Smith, John Kraus, C. Balanis and many others have investigated this
> > subject over the last 60-70 years, and have concluded that nothing smaller
> > is as effective on MW as a linear, vertical monopole at least 1/4-wave high,
> > using a good r-f gound
>
> Hi Richard
>
> so you are saying that as all the afore mentioned came to the same
> conclusion, there is no possibility they were 'all' wrong?, if that is
> the case then all is known and there is no point in trying to prove
> otherwise as there is nothing left to learn.
> I think not.
>
> Derek

The chances of them being wrong is about .01 %...
They have only had 70 years to double check themselves.. :/
The size of the small 4 ft antenna is the least of your problems.
Wait until you try to get all your power to it...
Myself, I think this "new" antenna is nothing new at all.
He's not doing anything that hasn't been done before.
But even that point is fairly moot..
The design is an inferior one when it comes down to it.
For a given height of vertical radiator, there is no form of
loading that will beat capacitive hat top loading using
no inductor at all.
Not in efficiency, and not in current distribution.
And even if a coil is needed to tune, it's still the best,
vs other methods. The top of the radiator is the best
place to add capacitance.
Top hat loading gives the most linear current
distribution through a short whip.

So...Do I get to re-invent and patent this new whiz
bang up top loaded vertical...
Har... Give me a break..
Then again, maybe I could talk the military into using
my superior antenna vs his inferior one. I could make
a zillion bucks overnight with all the lucrative contracts.
Move to Beverly Hills... Swimming pools...Britney!

Naw, after mulling it over, I think I'd rather stay in Tejas
with the normal people...

If you go to the hospital to get a bypass, do you want
a doctor that follows proven medical theory and practice,
or do you want Jethro and Granny to have a go at it?
:/
MK

2524. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 04:11:47 UTC
From: "R. Scott" <lintardspamtrap@scotts-home.net>
Message-ID: <lKKdnVKpNo1C4oTanZ2dnUVZ_rDinZ2d@comcast.com>
Source record: 35256

Oh no Here we go again.

10 years ago this was a major topic

and ridicule

2525. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 04:19:16 UTC
From: nm5k@wt.net
Message-ID: <1192853956.633314.99710@k35g2000prh.googlegroups.com>
Source record: 35257

On Oct 19, 11:11 pm, "R. Scott" <lintardspamt...@scotts-home.net>
wrote:
> Oh no Here we go again.
>
> 10 years ago this was a major topic
>
> and ridicule

Yea, if there is a new company called "Fractus", I bet a
character called Chippus is about to have kittens.
Maybe six or seven of them.
With little curly tails...
Fractus... Kinda reminds me of Festus...
Maaaathheeeewwww! What thar heck is that curly waaar
you got stuck on that there horses head?
Doc, have you ever done seen such a thang?
Miss Kitty! Maaaatheewws horse has a bed sprang
on his head! I done declare!

2526. Re: MA5B VS G3TPW CobWebb

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 09:24:43 UTC
From: Barrett <barrett@blueyounder.co.uk>
Message-ID: <vPjSi.389606$xp6.118850@fe3.news.blueyonder.co.uk>
Source record: 35258

What about the difference in performance between the MA5B, the G3TPW CobWebb
against the G5RV half size Ariel?

Thanks

"Barrett" <barrett@blueyounder.co.uk> wrote in message
news:JPKRi.374473$xp6.70764@fe3.news.blueyonder.co.uk...
>I have a very small garden and the Cushcraft MAB5 will be over hanging the
>boundary. I know the Cobweb isn't a beam.
>
> Has any one tried both and what is the difference between TX and RX
> between the MA5B and G3TPW CobWebb?
>
> Thanks
>
>

2527. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 10:00:43 UTC
From: Mark@k4yzRobesin.org
Message-ID: <g8kjh3liom72i3fg0j6q7h84alq3f9rr5g@4ax.com>
Source record: 35146
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS
since someone wants us to belive that he is steve

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but google

posts from these sorucees are fakes

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

2528. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 11:30:11 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <ffcos8len1@aioe.org>
Source record: 35259

"Derek" wrote
> where is it shown that Art is not following natural
> laws?. He has explained every step along the way
> and I see no place where he has strayed from natural law.

Below from earlier in this thread (quoting Art)...

" I say again, one must have equilibrium for maximum efficiency and
that requires a full wave length radiator and at the same time holding
to the LC ratio for that length. "

Natural law, and decades of field experience with commercial antenna
systems do not support these beliefs.

RF

2529. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 11:59:04 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <gL2dncF0tLrtclTanZ2dnUVZ8sijnZ2d@bt.com>
Source record: 35260

"John Doe" <hgorden@adelphia.net> wrote in message
news:yZ6dndiaQLshq4TanZ2dnUVZ_qqgnZ2d@adelphia.com...
>I am looking for the construction article "FRACTAL Antenna for 10m" that
>appeared sometime ago in I think either QST, Ham Radio, or 73 magazines.
>
> I have a lot of spare time on my hands - so I thought I would like to
> construct one and use it portable as I live in a Antenna Restricted
> Community.
>
> 73's
>
As others have mentioned, several articles appeared in various magazines about the design of fractal antennas. The basic idea is to fold a standard length of wire using a fractal pattern so that it fits into a smaller space. One solution I saw was to wind a wire back and forth across and along a plank of wood using pins or slots cut in the wood to support the turns. Taking a four inch wide piece of wood around eight feet long and winding equispaced turns you could easily fit 24 feet of wire along the plank.

```
__ __ __
|__| |__| |__| | Using a pattern like this.
```

Other more complex or even three dimensional designs can fit more wire into a given space.

Older interpretations of antenna theory predicted that the interaction between the closely spaced wires would effectively short out the turns and you would end up with the equivalent of an 8 foot length radiating element rather than the 24 feet of wire wound along the plank of wood. While there is interaction, the apparent reduction in radiator element length is not as bad as was predicted. So fractally wound elements can be worth the effort where space is at a premium.

It is significant that the majority of development work into these antennas has taken place for frequencies above 1Ghz. Main applications include mobile phones, RF ID tags, security and remote sensing tags. At Ghz frequencies, exotic patterns can be easily etched onto circuit boards at minimal cost. Koch snowflake like fractal patterns combined with circular whorls seem very popular with commercial manufacturers. A google search will reveal quite a few pictures of what is being produced.

It is not necessary to try and duplicate the complexity of professional designs. The main criteria seems to be to keep the wires as evenly spaced as possible, hence the width of the winding should be approximately equal to the linear step along the plank of wood or whatever support frame you are using, i.e. 4 inches up, 4 inches along, 4 inches down, four inches along, 4

inches up, etc. etc.

As you will doubtless appreciate, this is similar to a three dimensional coil being wound on a former. Because the fractal winding is flat, there are fewer inductance effects.

Obviously fractal antennae are designed for a specific frequency or band, but the type of winding pattern and spacing have an effect on the bandwidth. Obviously you will need two mirror image windings to create a dipole antenna, ideally as closely matched in dimensions as possible. Efficiencies can approach 50% of a full sized radiating element.

Hope this helps

Mike G0ULI

2530. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 12:15:23 UTC
From: Derek <blueyhi5s@yahoo.com.au>
Message-ID: <1192882523.750010.53080@q5g2000prf.googlegroups.com>
Source record: 35261

On Oct 20, 12:19 pm, n...@wt.net wrote:

>
>
> > > Oh no Here we go again.
>
> > > 10 years ago this was a major topic
>
> > > and ridicule

From the many Luddites on this group.

Derek.

2531. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 14:18:48 UTC
From: "H. Adam Stevens" <hstevens@totalaccess.net>
Message-ID: <13hk3ibtat6jd39@corp.supernews.com>
Source record: 35262

This reminds me of the "E H " antenna spiel.
"First we modify Maxwell's equations."

hahahahahahahahahahaha

73
H., NQ5H

"Richard Fry" <rfry@adams.net> wrote in message
news:ffcos8len1@aioe.org...
> "Derek" wrote
>> where is it shown that Art is not following natural
>> laws?. He has explained every step along the way
>> and I see no place where he has strayed from natural law.
> ----------
>
> Below from earlier in this thread (quoting Art)...
>
> " I say again, one must have equilibrium for maximum efficiency and
> that requires a full wave length radiator and at the same time holding
> to the LC ratio for that length. "
>
> Natural law, and decades of field experience with commercial antenna
> systems do not support these beliefs.
>
> RF

2532. Re: Miller effect - was: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 14:50:27 UTC
From: richardharrison@webtv.net
Message-ID: <21638-471A15B3-299@storefull-3252.bay.webtv.net>
Source record: 35265

Mac, N8TT wrote:
"It is difficult for me to see gain at the end of sn antenna wire."

Miller effect works in a triode tube by placing a larger signal voltage on the plate than on its grid. This increases the difference in number of electrons between grid and plate.

The charge of a capacitor is the difference in number of electrons on the two plates.

At the open circuit end of a 1/4-wave antenna, the incident and reflected voltages are in-phase and equal in magnitude, thus doubling voltage at the antenna tip. This increased voltage doubles the charge at that point over that produced by the incident voltage alone as Q=CE.

Mac is right. There is no mu factor in an antenna tip but there is a voltage and charge gain.

Best regards, Richard Harrison, KB5WZI

2533. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 14:55:30 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192892130.422130.229640@v29g2000prd.googlegroups.com>
Source record: 35263

On 19 Oct, 21:03, n...@wt.net wrote:
> On Oct 19, 5:17 am, Derek <blueyh...@yahoo.com.au> wrote:
>
>
>
>
>
> > On Oct 19, 6:28 am, "Richard Fry" <r...@adams.net> wrote:
>
> > snip
>
> > > \\ Enthusiasm is always good, but if it was possible to do what you outline
> > > using the radiation possible on 160 m solely from a structure in the shape
> > > of a 4 ft cube, IMO it would have been done long ago.
>
> > > Some very experienced antenna engineers including George Brown of RCA,
> > > Carl E. Smith, John Kraus, C. Balanis and many others have investigated this
> > > subject over the last 60-70 years, and have concluded that nothing smaller
> > > is as effective on MW as a linear, vertical monopole at least 1/4-wave high,
> > > using a good r-f gound
>
> > Hi Richard
>
> > so you are saying that as all the afore mentioned came to the same
> > conclusion, there is no possibility they were 'all' wrong?, if that is
> > the case then all is known and there is no point in trying to prove
> > otherwise as there is nothing left to learn.
> > I think not.
>
> > Derek
>
> The chances of them being wrong is about .01 %...
> They have only had 70 years to double check themselves.. :/
> The size of the small 4 ft antenna is the least of your problems.
> Wait until you try to get all your power to it...
> Myself, I think this "new" antenna is nothing new at all.
> He's not doing anything that hasn't been done before.
> But even that point is fairly moot..
> The design is an inferior one when it comes down to it.
> For a given height of vertical radiator, there is no form of
> loading that will beat capacitive hat top loading using
> no inductor at all.
> Not in efficiency, and not in current distribution.
> And even if a coil is needed to tune, it's still the best,

> vs other methods. The top of the radiator is the best
> place to add capacitance.
> Top hat loading gives the most linear current
> distribution through a short whip.
> So...Do I get to re-invent and patent this new whiz
> bang up top loaded vertical...
> Har... Give me a break..
> Then again, maybe I could talk the military into using
> my superior antenna vs his inferior one. I could make
> a zillion bucks overnight with all the lucrative contracts.

Yes, you to can apply for a patent for yourself regarding an antenna
and for listenning purposes only to boot. But you sir have a problem
or two.
First of all the PTO will not accept anything you "say" verbally which
is
what you are good at. Secondly you have to have faith and
understanding about what you propose. Thirdly you have to put
up front to the PTO and possibly others a substantial amount of money
which instead of pursuing your research you can purchase a
whole new radio set up.
So you do have a choice......put up or shut up
.

> Move to Beverly Hills... Swimming pools...Britney!
>
> Naw, after mulling it over, I think I'd rather stay in Tejas
> with the normal people...
>
> If you go to the hospital to get a bypass, do you want
> a doctor that follows proven medical theory and practice,
> or do you want Jethro and Granny to have a go at it?
> :/
> MK- Hide quoted text -
>
> - Show quoted text -

2534. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 15:01:08 UTC
From: "R. Scott" <lintardspamtrap@scotts-home.net>
Message-ID: <xrudnWKngO6ThYfanZ2dnUVZ_hCdnZ2d@comcast.com>
Source record: 35264

nm5k@wt.net wrote:
> On Oct 19, 11:11 pm, "R. Scott" <lintardspamt...@scotts-home.net>
> wrote:
>> Oh no Here we go again.
>>
>> 10 years ago this was a major topic
>>
>> and ridicule
>
> Yea, if there is a new company called "Fractus", I bet a
> character called Chippus is about to have kittens.
> Maybe six or seven of them.
> With little curly tails...
> Fractus... Kinda reminds me of Festus...
> Maaaathheeeewwww! What thar heck is that curly waaar
> you got stuck on that there horses head?
> Doc, have you ever done seen such a thang?
> Miss Kitty! Maaaatheewws horse has a bed sprang
> on his head! I done declare!
>

Please dont call on the Unnamed Chippus you may revive
him from the evil dead so he can threaten not to sell
his products to your company

2535. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 15:21:15 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192893675.928285.101460@i13g2000prf.googlegroups.com>
Source record: 35266

On 20 Oct, 04:59, "Mike Kaliski" <michael.kali...@tesco.net> wrote:
> "John Doe" <hgor...@adelphia.net> wrote in message
>
> news:yZ6dndiaQLshq4TanZ2dnUVZ_qqgnZ2d@adelphia.com...>I am looking for the construction article "FRACTAL Antenna for 10m" that
> >appeared sometime ago in I think either QST, Ham Radio, or 73 magazines.
>
> > I have a lot of spare time on my hands - so I thought I would like to
> > construct one and use it portable as I live in a Antenna Restricted
> > Community.
>
> > 73's
>
> As others have mentioned, several articles appeared in various magazines
snip.
> Obviously you will need two mirror image windings to create a dipole
> antenna,

Mike,
the definition I arrived at is that as long as the wire represents one
wave length,
is resonant and in equilibrium while at the same time holding to the L/
C ratio of the material in question.
This can be produced with just two degrees of freedom by folding
the wire at the half wave point
and then wind the two wires in pancake shape/form.
You can also wind two in series where capacitive actions
between them can create a variety of results.
The important point is that one must hold to the
conditions set in the definition
(no exceptions)

Art

ideally as closely matched in dimensions as possible. Efficiencies
> can approach 50% of a full sized radiating element.
>
> Hope this helps
>
> Mike G0ULI

2536. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 15:37:01 UTC
From: nm5k@wt.net
Message-ID: <1192894621.358711.192440@q5g2000prf.googlegroups.com>
Source record: 35267

On Oct 20, 9:55 am, art <aun...@insightbb.com> wrote:

>
> Yes, you to can apply for a patent for yourself regarding an antenna
> and for listenning purposes only to boot. But you sir have a problem
> or two.
> First of all the PTO will not accept anything you "say" verbally which
> is
> what you are good at. Secondly you have to have faith and
> understanding about what you propose. Thirdly you have to put
> up front to the PTO and possibly others a substantial amount of money
> which instead of pursuing your research you can purchase a
> whole new radio set up.
> So you do have a choice......put up or shut up

I feel no great need to re-invent an antenna.
I also feel no great need to bribe the patent office to ensure my
success of this re-invention, or to prove my faith or
understanding in top loaded verticals which were around
before I was born.
I have plenty of radios. Don't really need any more.
I do put up antennas quite often though.
So I guess this means I don't need to shut up.
MK

2537. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 16:34:01 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <T_OdnXBV6PF9sIfaRVnytQA@bt.com>
Source record: 35268

"art" <aunwin@insightbb.com> wrote in message
news:1192893675.928285.101460@i13g2000prf.googlegroups.com...
> On 20 Oct, 04:59, "Mike Kaliski" <michael.kali...@tesco.net> wrote:
>> "John Doe" <hgor...@adelphia.net> wrote in message
>>
>> news:yZ6dndiaQLshq4TanZ2dnUVZ_qqgnZ2d@adelphia.com...>I am looking for
>> the construction article "FRACTAL Antenna for 10m" that
>> >appeared sometime ago in I think either QST, Ham Radio, or 73 magazines.
>>
>> > I have a lot of spare time on my hands - so I thought I would like to
>> > construct one and use it portable as I live in a Antenna Restricted
>> > Community.
>>
>> > 73's
>>
>> As others have mentioned, several articles appeared in various magazines
> snip.
>> Obviously you will need two mirror image windings to create a dipole
>> antenna,
>
> Mike,
> the definition I arrived at is that as long as the wire represents one
> wave length, is resonant and in equilibrium while at the same time holding
> to the L/C ratio of the material in question. This can be produced with
> just two degrees of freedom by folding the wire at the half wave point and
> then wind the two wires in pancake shape/form.
> You can also wind two in series where capacitive actions between them can
> create a variety of results.
> The important point is that one must hold to the conditions set in the
> definition (no exceptions)
>
> Art
>
> ideally as closely matched in dimensions as possible. Efficiencies
>> can approach 50% of a full sized radiating element.
>>
>> Hope this helps
>>
>> Mike G0ULI
>
>
Art

I agree. Incidently the origin of the idea for fractal antennae apparently arose from the observation that hanging down the ends of a dipole, or bending it to fit a limited site didn't affect the efficiency too much. A university student decided to see just how much bending and could take place before the antenna became unusable and hey presto, the fractal antenna was invented and he had a thesis for his degree.

Mike G0ULI

2538. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 17:12:40 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192900360.085826.161720@v23g2000prn.googlegroups.com>
Source record: 35269

On 20 Oct, 09:34, "Mike Kaliski" <michael.kali...@tesco.net> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1192893675.928285.101460@i13g2000prf.googlegroups.com...
>
>
>
> > On 20 Oct, 04:59, "Mike Kaliski" <michael.kali...@tesco.net> wrote:
> >> "John Doe" <hgor...@adelphia.net> wrote in message
>
> >>news:yZ6dndiaQLshq4TanZ2dnUVZ_qqgnZ2d@adelphia.com...>Iam looking for
> >> the construction article "FRACTAL Antenna for 10m" that
> >> >appeared sometime ago in I think either QST, Ham Radio, or 73 magazines.
>
> >> > I have a lot of spare time on my hands - so I thought I would like to
> >> > construct one and use it portable as I live in a Antenna Restricted
> >> > Community.
>
> >> > 73's
>
> >> As others have mentioned, several articles appeared in various magazines
> > snip.
> >> Obviously you will need two mirror image windings to create a dipole
> >> antenna,
>
> > Mike,
> > the definition I arrived at is that as long as the wire represents one
> > wave length, is resonant and in equilibrium while at the same time holding
> > to the L/C ratio of the material in question. This can be produced with
> > just two degrees of freedom by folding the wire at the half wave point and
> > then wind the two wires in pancake shape/form.
> > You can also wind two in series where capacitive actions between them can
> > create a variety of results.
> > The important point is that one must hold to the conditions set in the
> > definition (no exceptions)
>
> > Art
>
> > ideally as closely matched in dimensions as possible. Efficiencies
> >> can approach 50% of a full sized radiating element.
>
> >> Hope this helps
>
> >> Mike G0ULI

>
> Art
>
> I agree. Incidently the origin of the idea for fractal antennae apparently
> arose from the observation that hanging down the ends of a dipole, or
> bending it to fit a limited site didn't affect the efficiency too much. A
> university student decided to see just how much bending and could take place
> before the antenna became unusable and hey presto, the fractal antenna was
> invented and he had a thesis for his degree.
>
> Mike G0ULI- Hide quoted text -
>
> - Show quoted text -

Yup He is way ahead of the average ham but he did have an engineering
background
now he is making a lot of money with a product that the average hame
decries.
I was looking at Tom's page W8ti and I was very suprised to see that
he states
an antenna must be straight no less plus a lot more in accurate
statements.
He has written articles as have many on this newsgroup but as I have
stated before
believe what you want but often it is not correct.
On this newsgroup I am often reminded of the scene around madame
guillotine with
the . hoards of baying crowds of the ignorant looking for blood.
Have to make a correction on past statements tho, instead of one
wavelength radiator it should read
" one wavelength or longer" because of the genorous number of
harmonics.
Cheers
Art KB9MZ....XG (uk)

2539. Re: Miller effect - was: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 17:31:14 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192901474.683712.4120@k35g2000prh.googlegroups.com>
Source record: 35270

On 20 Oct, 07:50, richardharri...@webtv.net (Richard Harrison) wrote:
> Mac, N8TT wrote:
>
> "It is difficult for me to see gain at the end of sn antenna wire."
>
> Miller effect works in a triode tube by placing a larger signal voltage
> on the plate than on its grid. This increases the difference in number
> of electrons between grid and plate.
>
> The charge of a capacitor is the difference in number of electrons on
> the two plates.

But a capacitor doesnot radiate.....the hole is getting deeper !

>
> At the open circuit end of a 1/4-wave antenna, the incident and
> reflected voltages are in-phase and equal in magnitude, thus doubling
> voltage at the antenna tip. This increased voltage doubles the charge at
> that point over that produced by the incident voltage alone as Q=CE.
>
> Mac is right. There is no mu factor in an antenna tip but there is a
> voltage and charge gain.
>
> Best regards, Richard Harrison, KB5WZI

2540. Re: 80m Vertical info

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 18:11:33 UTC
From: gb <w9nogbspam@arrlspamno.net>
Message-ID: <ydCdnZlYNeVF2YfanZ2dneKdnZydnZ2d@comcast.com>
Source record: 35271

"JERD" <jedunk@REMOVEbigpond.net.au> wrote in message
news:a%cSi.2069$CN4.647@news-server.bigpond.net.au...
> Old timer here, (VK5JE) wanting to get back into HF. Would really
> appreciate pointers to web based info on build it yourself 80m vertical or
> dipole. Have somewhat limited real estate!
>
> JERD
>

A9KW has various desgn and ideas, that he builds
http://www.zerofive-antennas.com/

gb

2541. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 18:42:25 UTC
From: nm5k@wt.net
Message-ID: <1192905745.586149.110440@e34g2000pro.googlegroups.com>
Source record: 35272

On Oct 20, 11:34 am, "Mike Kaliski" <michael.kali...@tesco.net> wrote:

>
> I agree. Incidently the origin of the idea for fractal antennae apparently
> arose from the observation that hanging down the ends of a dipole, or
> bending it to fit a limited site didn't affect the efficiency too much. A
> university student decided to see just how much bending and could take place
> before the antenna became unusable and hey presto, the fractal antenna was
> invented and he had a thesis for his degree.
>
> Mike G0ULI

Just linear loading with a fancy name..
Or the way I see it anyway..
The thing is... Most consider linear loading as
inferior to high Q coil loading, as long as the
coils are placed at the proper locations to
maximize current distribution.
But I can see their use in small items like
cell phones, etc..
I doubt if I would use one as a ham radio antenna
though.
Heck, my 160m "Z" dipole could be considered a
fractal. Even a dipole qualifies. All symmetrical
antennas can be called "fractals" if you wanted to
be strict about it.
MK

2542. APRSPoint 4.4 is released

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 18:54:51 UTC
From: "hxc98@yahoo.com" <hxc98@yahoo.com>
Message-ID: <1192906491.468626.25190@i13g2000prf.googlegroups.com>
Source record: 35273

New in this version,

1. Improved log file replay, with the ability to apply track list and
filters during the file loading process to reproduce different
tracking scenarios, and the ability to adjust replay speed,
2. Added TCP raw data window, and option to turn it on/off for better
performance,
3. Improved subnet filter handling,
4. Streamlined filter, settings, and track options interface, plus
other enhancements,

Visit www.aprspoint.com for more details and download.

Michael, KF6ZDM

2543. "Balancing" versus "cancelling"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 19:34:44 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192908884.463927.56230@v23g2000prn.googlegroups.com>
Source record: 35274

Looking thru various antenna pages on the web and I continually find reference
to inductance CANCELLING capacitance.
The operative word should be BALANCING and the difference is important . In all cases the capapicitor is still there and operative
as is the inductance.One cannot say they are cancelled so they can be disregarded.
You cannot make either of them inoperative or of no consequence even in the case where a clockwise
wound inductance is in series with a counterclockwise inductance since by definition
both are energy containers. When you have a resistive impedance for a full wavelength without a reactive component per se what it means is that the energy contained in each of the energy containers are equal thus allowing for symetry as in a loss less pendulum. If on does not have a full wave length you can still have equal energy sinks but their release of energy is not synonymous with each other thus there is no symetry.
So concentrate on the word "balance" or "equilibrium" when maximum efficiency is required.
Best regards
Art Unwin....KB9MZ......xg

2544. Re: Miller effect - was: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 20:00:44 UTC
From: richardharrison@webtv.net
Message-ID: <5868-471A5E6C-41@storefull-3254.bay.webtv.net>
Source record: 35276

Art wrote:
"But a capacitor does not radiate....."

Depends entirely on the size and configuration.
Please see pages 83 through 93 of "Transmission Lines, Antennas, and Wave Guides" by R.W.P King, Mimno, and Wing.

Best regards, Richard Harrison, KB5WZI

2545. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 20:07:31 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <8etSi.7020$IE2.720@newssvr22.news.prodigy.net>
Source record: 35275

nm5k@wt.net wrote:
> Heck, my 160m "Z" dipole could be considered a
> fractal. Even a dipole qualifies.

Yep, fractal stands for "fractional dimensions". A
dipole is primarily in one dimension. A "ground
plane" is primarily in two dimensions. Anything
that does not occupy all three dimensions equally
qualifies as a fractal.
--
73, Cecil http://www.w5dxp.com

2546. Re: Miller effect - was: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 20:29:31 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <LytSi.13001$lD6.11278@newssvr27.news.prodigy.net>
Source record: 35277

Richard Harrison wrote:
> Art wrote:
> "But a capacitor does not radiate....."
>
> Depends entirely on the size and configuration.

Yep, one of the the reasons for SMD caps is that
the leads on conventional caps radiate at UHF+
frequencies.
--
73, Cecil http://www.w5dxp.com

2547. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 20:45:32 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ffdpdc$lh8$1@news.albasani.net>
Source record: 35278

Richard Fry wrote:

>> ...
> The fundamentals of EM radiation are defined by natural laws, which even
> 50 years ago were rather well understood.
>
> New antenna designs always will be possible, but all of them of
> necessity must be based on, and follow natural law.
>
> RF

Sheer insanity and babbly-cockery!

Current "natural laws", and especially as defined by math, allows for a 377 ohm impedance to be given "nothing" (or, the ether--and indeed, there does appear to be some "property" responsible for it--just not the one presently given.)

Allows for a permittivity to be assigned to "nothing", actually the ether.

Allows for a permeability to be assigned to "nothing", actually, again, the ether.

Allows for the spinning of the earth and motion of our solar system to be involved in the equations/math of our antenna/rf calculations.

Nothing should be allowed to be logical, and, therefore, simply "NOTHING!" And, therefore unable to have any qualities, properties, effects, affects, laws, etc.

Until the above is accounted for and sorted into a logical theorem, present "antenna science" looks as if a bunch of African witch doctors are implementing it!

Admittedly, some progress is being made, however, little of that ever sees the light of day here ...

Regards,
JS

2548. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 21:16:51 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <7fuSi.7457$kj1.6090@bgtnsc04-news.ops.worldnet.att.net>
Source record: 35279

John Smith wrote:
> Richard Fry wrote:
>
> >> ...
>> The fundamentals of EM radiation are defined by natural laws, which
>> even 50 years ago were rather well understood.
>>
>> New antenna designs always will be possible, but all of them of
>> necessity must be based on, and follow natural law.
>>
>> RF
>
> Sheer insanity and babbly-cockery!
>
> Current "natural laws", and especially as defined by math, allows for a
> 377 ohm impedance to be given "nothing" (or, the ether--and indeed,
> there does appear to be some "property" responsible for it--just not the
> one presently given.)
>
> Allows for a permittivity to be assigned to "nothing", actually the ether.
>
> Allows for a permeability to be assigned to "nothing", actually, again,
> the ether.
>
> Allows for the spinning of the earth and motion of our solar system to
> be involved in the equations/math of our antenna/rf calculations.
>
> Nothing should be allowed to be logical, and, therefore, simply
> "NOTHING!" And, therefore unable to have any qualities, properties,
> effects, affects, laws, etc.
>
> Until the above is accounted for and sorted into a logical theorem,
> present "antenna science" looks as if a bunch of African witch doctors
> are implementing it!
>
> Admittedly, some progress is being made, however, little of that ever
> sees the light of day here ...
>
> Regards,
> JS

I guess I missed the part of Vincent's patent where he invokes modern
cosmological thinking to help explain his antenna.

8-)

Vincent does not claim any radical new physics or math, in the style of EH and CFA. Instead he simply combines several well-known elements into what he claims as a novel device. The USPO allowed his claims of novelty.

You can accept or reject his claim of novelty, but don't try to add some modern mumbo-jumbo more related to pondering the scope of the universe. I doubt that the URI Physics Department would support such ramblings without a lot more internal review.

73,
Gene
W4SZ

2549. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 21:34:18 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ffds8p$r1m$1@news.albasani.net>
Source record: 35280

Gene Fuller wrote:

>> ...
> Vincent does not claim any radical new physics or math, in the style of
> EH and CFA. Instead he simply combines several well-known elements into
> what he claims as a novel device. The USPO allowed his claims of novelty.
>
> You can accept or reject his claim of novelty, but don't try to add some
> modern mumbo-jumbo more related to pondering the scope of the universe.
> I doubt that the URI Physics Department would support such ramblings
> without a lot more internal review.
>
> 73,
> Gene
> W4SZ

Before our present physics and sciences stepped forward in an attempt to expand mankinds' knowledge, the same winds blew through the trees, the same sun rose and set, the same rivers flowed, the same earth spun, the same stars were seen, the oceans existed, the same universe lay spread before us--the same, the same, the same ...

However, way back when, spirits and the supernatural where given as explanations, now science attempts to provide the proper explanations--however, "what was" and "still is" was/is seen by all--both those who thought the spiritual/supernatural were responsible--and those who attempted to explain it by "science."

Such is, STILL, as it is today, we are all looking at the same thing, some of these things are, indeed, working--and working quite well--although, explanations may vary as to the "why" and "how"...

No radical changes or discoveries need to be had--just logical explanations had for what already is and has always been ... errors in our present thinking are quite obvious and abundant ... "true" explanations few and far between ...

We just now need to refine our math and knowledge to reflect the true world--accurately ...

Regards,
JS

2550. Re: "Balancing" versus "cancelling"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 21:35:09 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <ffdsaj$oe1$1@aioe.org>
Source record: 35281

"art" wrote
> Looking thru various antenna pages on the web and I continually
> find reference to inductance CANCELLING capacitance.
> The operative word should be BALANCING and the difference is
> important. In all cases the capapicitor is still there and operative
> as is the inductance. One cannot say they are cancelled so they can be
> disregarded. etc etc

No matter what one calls it, equal inductive and capacitive reactance at the input terminals of an antenna system (eg, resonance) is important only in achieving the most efficient power transfer from a source connected to those input terminals having an impedance matching the remaining pure (non-reactive) resistance of the antenna system

==> Antenna system reactance neither absorbs source power nor radiates, whether such reactance is capacitive, inductive, or in "balance / equilibrium." <==

Only pure radiation resistance will do so, and that is set by the natural radiation resistance of the antenna conductor(s), which in turn is related to the mechanical and electrical configuration of the radiating structure, and the operating frequency.

Setting up equal inductive and capacitive reactance values at the antenna system input terminals means that the real radiating structure of the antenna will receive the maximum power possible from a matched transmission line, which will maximize the fields that the system can produce from the net power available from the transmitter.

RF

2551. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 21:41:05 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13hktfiodabeac4@corp.supernews.com>
Source record: 35282

Mike Kaliski wrote:
>>
> As others have mentioned, several articles appeared in various magazines
> about the design of fractal antennas. The basic idea is to fold a
> standard length of wire using a fractal pattern so that it fits into a
> smaller space. One solution I saw was to wind a wire back and forth
> across and along a plank of wood using pins or slots cut in the wood to
> support the turns. Taking a four inch wide piece of wood around eight
> feet long and winding equispaced turns you could easily fit 24 feet of
> wire along the plank.
> __ __ __
> |__| |__| |__| | Using a pattern like this.
>
> Other more complex or even three dimensional designs can fit more wire
> into a given space. . .

This general category of antenna is often known as a "meander line", a technique used for making electrically short antennas which has been known and used for a very long time. "Fractal" antennas are a more recent idea. They're a class of meander lines using particular algorithms to do the meandering in a particular irregular way. Among the interesting properties of some of these antennas is the presence of non-harmonically related multiple resonances.

Many claims have been made for "fractal" antennas, among them being that they provide the best efficiency for a given physical area. Steve Best, VE9SRB, has credibly refuted this claim by creating some randomly-meandered designs which are more efficient than claimed best fractal designs. You'll find some of the history of this in the archives of this newsgroup. The EZNEC models he developed are still at http://eznec.com/misc/MI2/ for anyone interested to download and review. Those models were also used for papers he wrote on the topic in IEEE publications and, I believe, QEX. It's not clear what advantages, if any, "fractal" designs would have over random or other meander topologies for amateur use. The allure of "fractal" antennas seems more to be in the interesting mathematics and the cachet of being modern and revolutionary than in any demonstrable performance advantage.

Meander line antennas, including "fractals", share the same properties as other electrically short antennas: narrow bandwidth and high conductor current. The latter can result in poor efficiency due to I^2 * R loss. Meander lines are better than some other methods of loading and worse than others, depending on how the meander and other methods are implemented. It's just one of the techniques which antenna designers have in their bag of techniques to use.

Roy Lewallen, W7EL

2552. Re: "Balancing" versus "cancelling"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 22:12:58 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99CF9ACD237C9HuckleberryREMOVEbig@198.186.192.196>
Source record: 35283

> Looking thru various antenna pages on the web and I continually find
> reference
> to inductance CANCELLING capacitance.
> The operative word should be BALANCING and the difference is important
> . In all cases the capapicitor is still there and operative
> as is the inductance.One cannot say they are cancelled so they can be
> disregarded.
> You cannot make either of them inoperative or of no consequence even
> in the case where a clockwise
> wound inductance is in series with a counterclockwise inductance since
> by definition
> both are energy containers. When you have a resistive impedance for
> a full wavelength without a reactive component per se what it means is
> that the energy contained in each of the energy containers are equal
> thus allowing for symetry as in a loss less pendulum. If on does not
> have a full wave length you can still have equal energy sinks but
> their release of energy is not synonymous with each other thus there
> is no symetry.
> So concentrate on the word "balance" or "equilibrium" when maximum
> efficiency is required.
> Best regards
> Art Unwin....KB9MZ......xg
>

I see your point, but I think the issue you are having with
"balance" vs. "cancel" is more semantics than functional. It is easier
to perceive the issue as a cancellation when making calculations and
design, I think.

Ed K7AAT

2553. Re: Miller effect - was: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 22:22:37 UTC
From: Dave <noone@nowhere.com>
Message-ID: <NcvSi.728$6P3.425@trndny02>
Source record: 35284

"art" <aunwin@insightbb.com> wrote in message
news:1192901474.683712.4120@k35g2000prh.googlegroups.com...
> On 20 Oct, 07:50, richardharri...@webtv.net (Richard Harrison) wrote:
>> Mac, N8TT wrote:
>>
>> "It is difficult for me to see gain at the end of sn antenna wire."
>>
>> Miller effect works in a triode tube by placing a larger signal voltage
>> on the plate than on its grid. This increases the difference in number
>> of electrons between grid and plate.
>>
>> The charge of a capacitor is the difference in number of electrons on
>> the two plates.
>
>
> But a capacitor doesnot radiate.....the hole is getting deeper !

don't tell the designers of those funny little cross field antennas that!
their whole theory depends on capacitors creating a ratiating electric field
which then combines with their separately created magnetic field to create
an em wave.

2554. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 22:43:50 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <ffe0bc$3o3$1@aioe.org>
Source record: 35285

"John Smith" opined:
> ... Until the above is accounted for and sorted into a logical theorem,
> present "antenna science" looks as if a bunch of African witch doctors
> are implementing it!
>
> Admittedly, some progress is being made, however, little of that ever
> sees the light of day here ...

Then how do you account for the measured performance and commercial success of antenna systems that for the last 60+ years have implemented the antenna engineering principles originating from sources you have ridiculed in your post?

RF

2555. Re: Miller effect - was: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 23:17:40 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192922260.070452.191070@v23g2000prn.googlegroups.com>
Source record: 35286

On 20 Oct, 13:00, richardharri...@webtv.net (Richard Harrison) wrote:
> Art wrote:
>
> "But a capacitor does not radiate....."
>
> Depends entirely on the size and configuration.
> Please see pages 83 through 93 of "Transmission Lines, Antennas, and
> Wave Guides" by R.W.P King, Mimno, and Wing.
>
> Best regards, Richard Harrison, KB5WZI

Is this going to be the same garbage that you troted out from
Terman? You still haven't explained why you accepted that there
was high impedance at the top preventing current flow.
The impedance down the center is very low, just the
resistance of the copper or aluminium. When will you be ready to
give the correct interpretation using this new capacitance aproach?
Have we dismissed Miller. Most will agree with the side note you added
regarding what the charge of a capacitor is to which I will
add that there are more Irishmen in London than in Dublin.
Also Scotland has the highest red heds per capitor than anywhere
in the rest of the world but none of these facts have nothing to do
with respect to your wrong readings of Terman. Now you are bringing
forward a new book to take the place of Terman to prove something
that is not relavent to the fact why you posted erronius info.

2556. Re: Miller effect - was: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 23:29:14 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192922954.296403.112930@q3g2000prf.googlegroups.com>
Source record: 35287

On 20 Oct, 13:29, Cecil Moore <nos...@w5dxp.com> wrote:
> Richard Harrison wrote:
> > Art wrote:
> > "But a capacitor does not radiate....."
>
> > Depends entirely on the size and configuration.
>
> Yep, one of the the reasons for SMD caps is that
> the leads on conventional caps radiate at UHF+
> frequencies.
> --
> 73, Cecil http://www.w5dxp.com

The capacitor itself does not radiate ie what is
between the two plates but the size of a capacitor does matter when
releasing its charge that creates radiation. Since the time variance
of the charge release is what creats radiation it follows that the
size
of and the constrictions provided make a huge difference. (Read up on
Bernollis
and his work on fluids)
You can have a very small inductance with a very large capacitance
as the L.C. ratio stays intact but the time variance of energy
release
will certainly different in that moment of time when the radiation
pulse occurs
As with standard practices I am not taking into account the
inductance
of the capacitor plates themselves since it just provides an outlet
for posters to avoid repeat of past errors by changing the subject
Best regards
Art

2557. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-20 23:57:29 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192924649.000099.202170@q3g2000prf.googlegroups.com>
Source record: 35288

On 20 Oct, 14:41, Roy Lewallen <w...@eznec.com> wrote:
> Mike Kaliski wrote:
>
> > As others have mentioned, several articles appeared in various magazines
> > about the design of fractal antennas. The basic idea is to fold a
> > standard length of wire using a fractal pattern so that it fits into a
> > smaller space. One solution I saw was to wind a wire back and forth
> > across and along a plank of wood using pins or slots cut in the wood to
> > support the turns. Taking a four inch wide piece of wood around eight
> > feet long and winding equispaced turns you could easily fit 24 feet of
> > wire along the plank.
> > __ __ __
> > |__| |__| |__| | Using a pattern like this.
>
> > Other more complex or even three dimensional designs can fit more wire
> > into a given space. . .
>
> This general category of antenna is often known as a "meander line", a
> technique used for making electrically short antennas which has been
> known and used for a very long time. "Fractal" antennas are a more
> recent idea. They're a class of meander lines using particular
> algorithms to do the meandering in a particular irregular way. Among the
> interesting properties of some of these antennas is the presence of
> non-harmonically related multiple resonances.
Snip

The non- harmonically related multiple resonance is quite important
now that all ham freqencies are not harmonically related.
I have found that it is possible for a single Gaussian antenna to
be resonant on many frequencies that are not related purely by
balancing the LC ratio at a given radiator length of choice
without reliance on traps or harmonics. These are contained
in there own band pass circuit and which can be moved at will.
The importance being that there is less interference between
band users as well as ambidextry and a constant impedance.
The case for Fractals is somewhat different to ham use in that for an
encapsulated
high frequency SYSTEM it matters not if what some would call the feed
line radiated
since usually power is not a main consideration making it ideal for
stealth purposes
since the fractal meanderings can be made to conform to any shape
structure while
maintaining a desirable LC ratio which with the use of laminated

circuitry is
becoming more available.

Art KB9MZ

snip
>
> Roy Lewallen, W7EL

2558. Re: "Balancing" versus "cancelling"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 00:37:15 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192927035.912841.88890@t8g2000prg.googlegroups.com>
Source record: 35289

On 20 Oct, 15:12, Ed G <Huckleberry_REMO...@bigvalley.net> wrote:
> > Looking thru various antenna pages on the web and I continually find
> > reference
> > to inductance CANCELLING capacitance.
> > The operative word should be BALANCING and the difference is important
> > . In all cases the capapicitor is still there and operative
> > as is the inductance.One cannot say they are cancelled so they can be
> > disregarded.
> > You cannot make either of them inoperative or of no consequence even
> > in the case where a clockwise
> > wound inductance is in series with a counterclockwise inductance since
> > by definition
> > both are energy containers. When you have a resistive impedance for
> > a full wavelength without a reactive component per se what it means is
> > that the energy contained in each of the energy containers are equal
> > thus allowing for symetry as in a loss less pendulum. If on does not
> > have a full wave length you can still have equal energy sinks but
> > their release of energy is not synonymous with each other thus there
> > is no symetry.
> > So concentrate on the word "balance" or "equilibrium" when maximum
> > efficiency is required.
> > Best regards
> > Art Unwin....KB9MZ......xg
>
> I see your point, but I think the issue you are having with
> "balance" vs. "cancel" is more semantics than functional. It is easier
> to perceive the issue as a cancellation when making calculations and
> design, I think.
>
> Ed K7AAT- Hide quoted text -
>
> - Show quoted text -

Yes that may be true but with the increasing reliance on mathematics
and computors
the gimmicks that come with mathematics are distorting things. Tho an
inductance
may be "cancelled" out it is still there which created a magnetic
field which may
or may not be affected by an alternately counter wound inductance
since energy is still
being used to create a magnetic field amoungst other things. I would
imagine if
the inductances were used for storing energy mathematically that fact

would be
hidden leading research into a incorrect direction.
For me who is working around the LC ratio with respect to antennas
Ithere are advantages
for maximum capacitance and inductance vessels for max time varience
of energy discharge
while at the same time keeping to the required LC ratio at point of
feed since the
larger the storage vessel the faster the energy release or explosion
which then means
a higher velocity for free electrons to carry communication.
Note with respect to the H bomb tests in the Pacific where the more
powerfull explosion
wiped out the Honolulu electrical grid which had not happened before
thus the velocity
of the explosion or release had a direct relationship with radiation.
Best regards
Art

2559. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 00:41:11 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1192927271.728764.324220@z24g2000prh.googlegroups.com>
Source record: 35290

On Oct 20, 4:57 pm, art <aun...@insightbb.com> wrote:
...
> The case for Fractals is somewhat different to ham use in that for an
> encapsulated
> high frequency SYSTEM it matters not if what some would call the feed
> line radiated
> since usually power is not a main consideration making it ideal for
> stealth purposes
> since the fractal meanderings can be made to conform to any shape
> structure while
> maintaining a desirable LC ratio which with the use of laminated
> circuitry is
> becoming more available.

It appears that the above MAY actually be a sentence. However, with
74 words in it, I get completely lost before I get to the end of it.
Would you be so kind as to diagram it for us, Art, or at least divide
it up into something a little more manageable?

Thanks.

Cheers,
Tom

2560. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 01:04:24 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192928664.025600.177670@t8g2000prg.googlegroups.com>
Source record: 35191

On 20 Oct, 17:41, K7ITM <k7...@msn.com> wrote:
> On Oct 20, 4:57 pm, art <aun...@insightbb.com> wrote:
> ...
>
> > The case for Fractals is somewhat different to ham use in that for an
> > encapsulated
> > high frequency SYSTEM. It matters not if what some would call the feed
> > line radiated
> > since usually power is not a main consideration making it ideal for
> > stealth purposes.
> > Fractal meanderings can be made to conform to any shape
> > structure while
> > maintaining a desirable LC ratio which with the use of laminated
> > circuitry is
> > becoming more available.
>
> It appears that the above MAY actually be a sentence. However, with
> 74 words in it, I get completely lost before I get to the end of it.
> Would you be so kind as to diagram it for us, Art, or at least divide
> it up into something a little more manageable?
>
> Thanks.
>
> Cheers,
> Tom

2561. Re: "Balancing" versus "cancelling"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 01:29:34 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <ffea25$s5b$1@aioe.org>
Source record: 35192

"art" wrote
> For me who is working around the LC ratio with respect to antennas there
> are advantages for maximum capacitance and inductance vessels for max time
> varience of energy discharge while at the same time keeping to the
> required LC ratio at point of
feed since the larger the storage vessel the faster the energy release or explosion which then means a higher velocity for free electrons to carry communication.

Attention:"art"

You have posted your concepts and beliefs here, but your posts on this topic are not supported or proven by physical science, and field results going back some 60+ years.

Why do you persist in posting such claims?

RF

2562. Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 01:37:00 UTC
From: Dave Typinski <nospam@nospam.net>
Message-ID: <healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com>
Source record: 35193

Anyone have any ideas about what one might do with a television receive-only (TVRO) antenna? The thing is 10' diameter and it's mine for the price of dismantling it and hauling it out of the present owner's back yard.

I'm thinking radio astronomy. Might be nice to make my own radio map of the galaxy. I'm guessing that this would work okay somewhere between 1 and 10 GHz... which means making a feed horn... which is easy enough to do.

What else could I do with this antenna? Other than covering it in polyethylene sheet to make a really big bird bath...
--
Dave Typinski
AJ4CO

2563. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 02:52:08 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192935128.754086.267040@q5g2000prf.googlegroups.com>
Source record: 35194

On 15 Oct, 12:38, art <aun...@insightbb.com> wrote:
> On 14 Oct, 16:55, "Jimmie D" <GFEN...@carolina.rr.com> wrote:
>
>
>
>
>
> > "John Smith" <assemblywiz...@gmail.com> wrote in message
>
> >news:feu775$td7$1@news.albasani.net...
>
> > > art wrote:
>
> > > > ...
> > >> Time to mow the grass for the last time and empty the gas tank for the
> > >> winter.
> > >> Art KB9MZ
>
> > > Be lazy--just dump a bit of gas stabilizer in! ;-)
>
> > > JS
>
> > And crank it once a month
>
> > Jimmie
>
> Finally got the aluminium sheets secured and now I have to find a
> microphone
> so I can work some low power over the next two weeks.
> I am anxious to see if it will duplicale the bottom antenna of a stack
> where
> the capacitor/antenna bleeds off noise to the ground.
> Antenna will stay sitting on the ground until I get a feel of how it
> reacts in the coming days of showers.
> It is set up as a cloud burner at the moment so I should get some
> contacts.
> All bands seem to be active so I will put a chair in the yard and play
> Maybe even take a photo for the record!
> Plenty of harmonics so most bands should be available
> Art
> Art- Hide quoted text -
>
> - Show quoted text -

With 2 4 foot square alum panels 4 foot apart with circular
polarised 160M antenna in the capacitive field.All bands were S0
with 160M very active with strong signals. Could hear noise
and some static crashes from a distance but none that
affected S meter position. Early days yet but would appear I am
duplicating lower antenna of a stack since the S meter was at
rest when no signal present. Haven't got the rotor connected but
by listening to nets on 160M it strongly suggests it is directive
along the axis of the windings as expected.
Storms this coming week so I should be able to
determine antenna functions better. At present I have minimal
experience on the top band. Have not yet installed jumpers for
other bands nor installed a varometer at the feed point
but still have time before the snow flies
Regards
Art Unwin KB9MZ

2564. Re: Miller effect - was: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 03:59:38 UTC
From: richardharrison@webtv.net
Message-ID: <28649-471ACEAA-11@storefull-3255.bay.webtv.net>
Source record: 35195

Art Wrote:
"You still haven`t explained why you accepted that there was high impedance at the top preventing current flow."

Readers of this thread already know that there is a class of materials known as insulators and that free-space and the earth`s atmosphere belong to that class even though they are mostly immaterial.

If you would read the pages I suggested from R.W.P. King`s writing in his section on Antennas in "Transmission Lines, Antennas, and Wave Guides, you will find: 1. Electric Charges and Currents and the Electromagnetic Field, 2. The General Law of Electromagnetic Action, 3. Special Case of the Near Zone, 4. Special Case of the Far Zone, 5. Far Zone, 6. Closed and Open Circuits, 7. Properties of an a Antenna, 8. Leading Term in the Distribution of Current and Charge along a Center-driven Highly Conducting Antenna of Extremely Small Radius, 9. Distribution of Current along a Symmetrical Antenna of Small Radius, 10. Input Self-Impedance of Symmetrical Center-drive. Antenna of Small Radius.

Those numbered items are just the titles of the sections which are filled with text and illistrations which clarify the issues discussed in this thread. I`ll leave it to the reader to search out the wealth of information contained therein.

Best regards, Richard Harrison, KB5WZI

2565. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 05:01:19 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <471add4a$0$26332$4c368faf@roadrunner.com>
Source record: 35196

"Dave Typinski" <nospam@nospam.net> wrote in message
news:healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com...
> Anyone have any ideas about what one might do with a television
> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
> for the price of dismantling it and hauling it out of the present
> owner's back yard.
>
> I'm thinking radio astronomy. Might be nice to make my own radio map
> of the galaxy. I'm guessing that this would work okay somewhere
> between 1 and 10 GHz... which means making a feed horn... which is
> easy enough to do.
>
> What else could I do with this antenna? Other than covering it in
> polyethylene sheet to make a really big bird bath...
> --
> Dave Typinski
> AJ4CO

I know of a couple of guys that took two of them, one for rx and one for tx, tx was a microwave oven mgnetron. He and his frined talked to each other via troposcatter. I do know if a maggie operates within a ham band or not but it didnt matter too much for these guys because they didnt have a ticket anyway.

Jimmie

2566. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 05:03:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ffemim$b15$1@news.albasani.net>
Source record: 35197

Richard Fry wrote:

>> ...
> Then how do you account for the measured performance and commercial
> success of antenna systems that for the last 60+ years have implemented
> the antenna engineering principles originating from sources you have
> ridiculed in your post?
>
> RF

I said what I meant and meant what I said.

Our present formulas/equations leave much to be desired and apply only within narrow constraints of construction and design. However, when dealing with these antennas of strictly limited proportions and design (long wire, dipole, 1/4-1/2 monopole, etc.) these "approximations" are usually adequate ... stray too far from "conventional" and you find they begin to fall apart around the edges.

JS

2567. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 06:25:27 UTC
From: richardharrison@webtv.net
Message-ID: <14749-471AF0D7-344@storefull-3256.bay.webtv.net>
Source record: 35198

Art wrote:
"Still you can`t blame them if all they know comes from the ARRL books. After all it is a hobby and in the early days many did not have an opportunity for a college education."

Despite Art`s disdain for amateurs, I`ve found solid information in the "ARRL Antenna Book". Mine contains Characteristics of a lambda/4 monopole which includes: "The current in a lambda/4 monopole varies practically sinusoidally (as is the case with a lambda/2 wire), and is highest at the ground-plane connection. The RF voltage, however is highest at the open (top) end and minimum at the ground-plane connection." The reason for this is already given in this thread.

Best regards, Richard Harrison, KB5WZI

2568. Re: APRSPoint 4.4 is released

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 10:23:16 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <fpKdnSlXQ8E9tYbanZ2dnUVZ8q_inZ2d@pipex.net>
Source record: 35199

> Visit www.aprspoint.com for more details and download.
==========
Sadly not for Linux ....as yet.

Frank GM0CSZ / KN6WH

2569. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 10:39:12 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <6fadnUN_Gd3AsYbanZ2dnUVZ8vudnZ2d@pipex.net>
Source record: 35200

Dave Typinski wrote:
> Anyone have any ideas about what one might do with a television
> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
> for the price of dismantling it and hauling it out of the present
> owner's back yard.
>
> I'm thinking radio astronomy. Might be nice to make my own radio map
> of the galaxy. I'm guessing that this would work okay somewhere
> between 1 and 10 GHz... which means making a feed horn... which is
> easy enough to do.
>
> What else could I do with this antenna? Other than covering it in
> polyethylene sheet to make a really big bird bath...
==========
Possible usage:
1) EME amateur comms
2) WiFi low power experiments (provided there is line of sight freedom)
I remember having seen a web site with reports (incl photographs) that some youngsters bridged a 125 km path using off the shelf equipment and dishes having a size like yours.

Hopefully you don't have just the dish but also a mounting pedestal and perhaps even a motorised system .

Frank GM0CSZ / KN6WH

2570. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 11:00:35 UTC
From: gb <w9nogbspam@arrlspamno.net>
Message-ID: <CY-dnYCMx8zFrIbanZ2dnUVZ_gidnZ2d@comcast.com>
Source record: 35201

"Dave Typinski" <nospam@nospam.net> wrote in message
news:healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com...
> Anyone have any ideas about what one might do with a television
> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
> for the price of dismantling it and hauling it out of the present
> owner's back yard.
>
> I'm thinking radio astronomy. Might be nice to make my own radio map
> of the galaxy. I'm guessing that this would work okay somewhere
> between 1 and 10 GHz... which means making a feed horn... which is
> easy enough to do.
>
> What else could I do with this antenna? Other than covering it in
> polyethylene sheet to make a really big bird bath...
> --
> Dave Typinski
> AJ4CO

Additional Phase 3 satellites (AMSAT-DL P3E and AMSAT-NA Eagle in the
2009/2010 timeframe) are epected to be lauched in next 24 months -- plenty
of leaisurely time to rework and install a BUD for "S' or "C" band -- on a
budget.
http://www.ultimatecharger.com/dish.html

Robert, W0LMD shows you how to build a proper Dish Feed
http://www.ultimatecharger.com/Dish_Feed.html

2571. Re: Foursquare arrays of 40M verticals

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 13:04:55 UTC
From: ZEROFIVEANTENNAS@AOL.COM
Message-ID: <1192971895.209861.86180@e9g2000prf.googlegroups.com>
Source record: 35202

On Oct 16, 2:50?pm, art <aun...@insightbb.com> wrote:
> On 16 Oct, 04:16, Denny <k...@mailblocks.com> wrote:
>
>
>
>
>
> > Let me second Richard's comments about radials needing to be some
> > specific fraction of a wave - not....
> > Just put down the radials you can manage... If it isn't a perfect
> > circle around the antenna, don't even think about it, put the radials
> > down and enjoy your antenna..
> > Don't measure them, just pace them out from the antenna, cut and
> > secure the end, step sideways, secure another end and pace back to the
> > antenna, repeat... Whatever you get down will work...
> > Read, K3LR's comments about putting up a low 160 inverted L for an
> > impromptu contest while on vacation, having just two 1/4W radials and
> > working 40 some states and a bunch of countries...
> > So, assuming you can get down 20 or more radials under each vertical,
> > the 4 square will work...
> > If you could get down lots more radials the 4 square will work a bit
> > better on weak signals (strong signals won't notice how many radials
> > you have down)
> > If you could get down 120 'full wave' radials, the 4 square will work
> > the very best it can be (roughly 2 ohms series resistance on the
> > ground circuit)...
> > But after 50 radials of random length, you will be hard pressed to
> > tell any difference between that and the 120 radial 'perfect' ground
> > plane...
>
> > cheers ...
> > denny/k8do
>
> Exactly! All you are doing is providing a low impedance
> to ground so the return current gets back to transmitter ground
> instead of the travelling up the outside of the coax.
> Myths are really hard to put down
> Art- Hide quoted text -
>
> - Show quoted text -

Hi Tm
I have a 40 meter 4 square special on my web site if you would like to
check it out.

I also have guyed 80 meter verticals ,They are 1/2 the cost of the
freestanding ones.
Contact me if you have any questions.

TOM
N9ZV

2572. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 14:38:05 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
Message-ID: <471b62e2$0$32524$4c368faf@roadrunner.com>
Source record: 35203

>
> Additional Phase 3 satellites (AMSAT-DL P3E and AMSAT-NA Eagle in the
> 2009/2010 timeframe) are epected to be lauched in next 24 months -- plenty
> of leaisurely time to rework and install a BUD for "S' or "C" band -- on a
> budget.
> http://www.ultimatecharger.com/dish.html
>
> Robert, W0LMD shows you how to build a proper Dish Feed
> http://www.ultimatecharger.com/Dish_Feed.html
>
>
>

Given past history with the SAT program, I would wait till assets are in
orbit and operational.

Still no harm in planing for such operations while installing the dish.

2573. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 16:03:07 UTC
From: Dave <nowhere@nowhere.com>
Message-ID: <471b783c@212.67.96.135>
Source record: 35204

art wrote:
> imaginations. Sorry. 73
>
> Sorry.
> There is a patent issued and many, many, more in the pipeline.

Having tons of patents means very little IMHO. It often just a PR exercise, to make it appear the company has worthwhile intellectual property.

I've seem some really useless patents.

> Look up Fractus antennas or subscribe to the quarterly industrial
> magazine
> called Antennas.

Probably more worthwhile is something like the IEEE's antennas and propogation, to which I do described.

> The Fractus company was featured at the Antenna
> exhibition in
> Denver last month. Entrance fee was about $1000

And how many companies/individuals actually paid the $1000? I suspect most got in with special offers, or fees were waived completely. This is quite common - the published entry price of conferences is no measure of quality.

2574. DVB-t (UFH) log periodic question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 16:14:06 UTC
From: luc o <>
Message-ID: <Xns99D0B97F482C7luco53hotmailcom@194.134.69.69>
Source record: 35205

Hi!

I want to design and build a log periodic for DVB-T and I've found
'LOGPERIO.XLS', a calculation program in Excel format.

Anyone tried this or have experiences with it?
All comments and suggestions are welcome!

Thanx,

Luc

2575. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 16:48:28 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <wpLSi.468$_64.250@trnddc02>
Source record: 35206

"Dave Typinski" <nospam@nospam.net> wrote in message
news:healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com...
> Anyone have any ideas about what one might do with a television
> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
> for the price of dismantling it and hauling it out of the present
> owner's back yard.
>
> I'm thinking radio astronomy. Might be nice to make my own radio map
> of the galaxy. I'm guessing that this would work okay somewhere
> between 1 and 10 GHz... which means making a feed horn... which is
> easy enough to do.
>
> What else could I do with this antenna? Other than covering it in
> polyethylene sheet to make a really big bird bath...
> --
> Dave Typinski
> AJ4CO

Hi Dave

NOAAPORT uses a satellite over the Equator, South of Texas to transmit satellite images in near Real Time. You can easily build a station for displaying good images of the Florida as seen from space.

Jerry

2576. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 17:17:21 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192987041.376667.76530@k35g2000prh.googlegroups.com>
Source record: 35207

On 21 Oct, 09:03, Dave <nowh...@nowhere.com> wrote:
> art wrote:
> > imaginations. Sorry. 73
>
> > Sorry.
> > There is a patent issued and many, many, more in the pipeline.
>
> Having tons of patents means very little IMHO. It often just a PR
> exercise, to make it appear the company has worthwhile intellectual
> property.
>
> I've seem some really useless patents.
>
> > Look up Fractus antennas or subscribe to the quarterly industrial
> > magazine
> > called Antennas.
>
> Probably more worthwhile is something like the IEEE's antennas and
> propogation, to which I do described.
>
> > The Fractus company was featured at the Antenna
> > exhibition in
> > Denver last month. Entrance fee was about $1000
>
> And how many companies/individuals actually paid the $1000? I suspect
> most got in with special offers, or fees were waived completely. This is
> quite common - the published entry price of conferences is no measure of
> quality.

I went to the same place a couple of years ago when they had the
International
industrial computor show.Universities got a 15% discount that I
believe was
also available to overseas attendants other wise you had to pay the
full wack.
Relatives were allowed in free for the last 2 hours on the last day.
Exhibitioners paid the full wack for space but were allowed a few free
tickets
for commentators.
Don't you ever have anything positive to say?
Art

2577. Re: 80m Vertical info

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 17:21:12 UTC
From: Steve <sdaniel13@speakeasy.net>
Message-ID: <1192987272.172193.129440@i13g2000prf.googlegroups.com>
Source record: 35208

On Oct 20, 2:11 pm, "gb" <w9nogbs...@arrlspamno.net> wrote:
> "JERD" <jed...@REMOVEbigpond.net.au> wrote in message
>
> news:a%cSi.2069$CN4.647@news-server.bigpond.net.au...
>
> > > Old timer here, (VK5JE) wanting to get back into HF. Would really
> > > appreciate pointers to web based info on build it yourself 80m vertical or
> > > dipole. Have somewhat limited real estate!
>
> > > JERD
>
> A9KW has various desgn and ideas, that he buildshttp://www.zerofive-antennas.com/
>
> gb

Occasionally I'll listen to the online receiver made available by
K2JEU (http://www.ralabs.com/webradio/). Over the years he has used
various diffent antennas, ranging from longwires, to beams to most
recently a roughly 75 ft sloper. However, at one point he was using
40+ vertical from zerofive and it was vastly superior to every other
antenna I've see him use (excepting the beam, which doesn't belong in
the same comparison class). I almost couldn't believe it. I'd have
expected a large vertical to be pretty noisy, but the zerofive antenna
was incredibly quiet. I don't have space for such an antenna myself,
but I was awfully impressed with this one. It was really something.

Steve
KC2SIZ

2578. Re: What is the antenna current path or route

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 17:28:24 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1192987704.391131.95090@e34g2000pro.googlegroups.com>
Source record: 35209

On 20 Oct, 23:25, richardharri...@webtv.net (Richard Harrison) wrote:
> Art wrote:
>
> "Still you can`t blame them if all they know comes from the ARRL books.
> After all it is a hobby and in the early days many did not have an
> opportunity for a college education."
>
> Despite Art`s disdain for amateurs, I`ve found solid information in the
> "ARRL Antenna Book". Mine contains Characteristics of a lambda/4
> monopole which includes: "The current in a lambda/4 monopole varies
> practically sinusoidally (as is the case with a lambda/2 wire), and is
> highest at the ground-plane connection. The RF voltage, however is
> highest at the open (top) end and minimum at the ground-plane
> connection." The reason for this is already given in this thread.
>
> Best regards, Richard Harrison, KB5WZI

You still haven't explained your comment regarding the high
impedance at the top of an antenna. Are you going to withdraw it?
My disdain is for those who put on the mantle of an expert and talk
like all is known about antennas without applying any logic of their
own

2579. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 17:33:47 UTC
From: Dave Typinski <nospam@nospam.net>
Message-ID: <sc2nh3drjnt2cegf9igomi60gtp3fs047r@4ax.com>
Source record: 35210

On Sun, 21 Oct 2007 01:01:19 -0400, "Jimmie D"
<GFENDER@carolina.rr.com> wrote:
>
>"Dave Typinski" <nospam@nospam.net> wrote in message
>news:healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com...
>> Anyone have any ideas about what one might do with a television
>> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>> for the price of dismantling it and hauling it out of the present
>> owner's back yard.
>>
>> I'm thinking radio astronomy. Might be nice to make my own radio map
>> of the galaxy. I'm guessing that this would work okay somewhere
>> between 1 and 10 GHz... which means making a feed horn... which is
>> easy enough to do.
>>
>> What else could I do with this antenna? Other than covering it in
>> polyethylene sheet to make a really big bird bath...
>> --
>> Dave Typinski
>> AJ4CO
>
>I know of a couple of guys that took two of them, one for rx and one for tx,
>tx was a microwave oven mgnetron. He and his frined talked to each other via
>troposcatter. I do know if a maggie operates within a ham band or not but it
>didnt matter too much for these guys because they didnt have a ticket
>anyway.
>
>Jimmie

I thought about magnetrons... but not for communication. My idea is
to set it up as a radar station to measure the distance to the Moon. A
microwave oven magnetron operates at 2450 MHz, which is right at the
upper edge of the 13cm ham band. Unfortunately, magnetrons produce a
really dirty, wide output. Worse, being right at the edge of the
band, half the RF energy would be out of band.

I don't know if one can re-tune a magnetron by the addition of
external components; I'd like to get the thing down to 2.42 GHz to put
the emission in the center of the 13cm band. There are such things as
tunable magnetrons; but, they aren't found in microwave ovens, which
means they won't likely be had for free.

That said, I'd sure like to look at the output from an oven magnetron
with a spectrum analyzer. Maybe the output isn't as dirty and wide as
I think it is.

--
Dave Typinski
AJ4CO

2580. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 17:37:08 UTC
From: Dave Typinski <nospam@nospam.net>
Message-ID: <ac3nh31om4h7gvb2h4ff7131nqbuqccuik@4ax.com>
Source record: 35211

On Sun, 21 Oct 2007 11:39:12 +0100, Highland Ham
<abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:

>Dave Typinski wrote:
>> Anyone have any ideas about what one might do with a television
>> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>> for the price of dismantling it and hauling it out of the present
>> owner's back yard.
>>
>> I'm thinking radio astronomy. Might be nice to make my own radio map
>> of the galaxy. I'm guessing that this would work okay somewhere
>> between 1 and 10 GHz... which means making a feed horn... which is
>> easy enough to do.
>>
>> What else could I do with this antenna? Other than covering it in
>> polyethylene sheet to make a really big bird bath...
>==========
>Possible usage:
>1) EME amateur comms
>2) WiFi low power experiments (provided there is line of sight freedom)
>I remember having seen a web site with reports (incl photographs) that
>some youngsters bridged a 125 km path using off the shelf equipment and
>dishes having a size like yours.
>
>Hopefully you don't have just the dish but also a mounting pedestal and
>perhaps even a motorised system .
>
>Frank GM0CSZ / KN6WH

Yep, got the pedestal and the azimuth drive motor.

125 km at 2.4 GHz? How's that work? What were they bouncing the
signal off of? That's definitely further than line of sight.
--
Dave Typinski
AJ4CO

2581. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 17:41:30 UTC
From: Dave Typinski <nospam@nospam.net>
Message-ID: <eo3nh3p185kt4n87gijbae0i0nb05e2hp8@4ax.com>
Source record: 35212

On Sun, 21 Oct 2007 06:00:35 -0500, "gb" <w9nogbspam@arrlspamno.net>
wrote:

>"Dave Typinski" <nospam@nospam.net> wrote in message
>news:healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com...
>> Anyone have any ideas about what one might do with a television
>> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>> for the price of dismantling it and hauling it out of the present
>> owner's back yard.
>>
>> I'm thinking radio astronomy. Might be nice to make my own radio map
>> of the galaxy. I'm guessing that this would work okay somewhere
>> between 1 and 10 GHz... which means making a feed horn... which is
>> easy enough to do.
>>
>> What else could I do with this antenna? Other than covering it in
>> polyethylene sheet to make a really big bird bath...
>> --
>> Dave Typinski
>> AJ4CO
>
>Additional Phase 3 satellites (AMSAT-DL P3E and AMSAT-NA Eagle in the
>2009/2010 timeframe) are epected to be lauched in next 24 months -- plenty
>of leaisurely time to rework and install a BUD for "S' or "C" band -- on a
>budget.
>http://www.ultimatecharger.com/dish.html
>
>Robert, W0LMD shows you how to build a proper Dish Feed
>http://www.ultimatecharger.com/Dish_Feed.html

Heh - I had bumped into that web site a coupla months ago, which is
what got me thinking about this project. Then I lost the link - so
thanks for posting it!
--
Dave Typinski
AJ4CO

2582. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 17:48:04 UTC
From: Dave Typinski <nospam@nospam.net>
Message-ID: <d54nh31vj604a1ilkf8igs1kggfb2jes4m@4ax.com>
Source record: 35213

On Sun, 21 Oct 2007 16:48:28 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

>
>"Dave Typinski" <nospam@nospam.net> wrote in message
>news:healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com...
>> Anyone have any ideas about what one might do with a television
>> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>> for the price of dismantling it and hauling it out of the present
>> owner's back yard.
>>
>> I'm thinking radio astronomy. Might be nice to make my own radio map
>> of the galaxy. I'm guessing that this would work okay somewhere
>> between 1 and 10 GHz... which means making a feed horn... which is
>> easy enough to do.
>>
>> What else could I do with this antenna? Other than covering it in
>> polyethylene sheet to make a really big bird bath...
>> --
>> Dave Typinski
>> AJ4CO
>
> Hi Dave
>
> NOAAPORT uses a satellite over the Equator, South of Texas to transmit
>satellite images in near Real Time. You can easily build a station for
>displaying good images of the Florida as seen from space.
>
> Jerry

Now /that/ would be a cool project! Thanks, Jerry.
--
Dave Typinski
AJ4CO

2583. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 18:15:48 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <oHMSi.1115$0l4.402@trnddc08>
Source record: 35214

"Dave Typinski" <nospam@nospam.net> wrote in message
news:d54nh31vj604a1ilkf8igs1kggfb2jes4m@4ax.com...
> On Sun, 21 Oct 2007 16:48:28 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
>>
>>"Dave Typinski" <nospam@nospam.net> wrote in message
>>news:healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com...
>>> Anyone have any ideas about what one might do with a television
>>> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>>> for the price of dismantling it and hauling it out of the present
>>> owner's back yard.
>>>
>>> I'm thinking radio astronomy. Might be nice to make my own radio map
>>> of the galaxy. I'm guessing that this would work okay somewhere
>>> between 1 and 10 GHz... which means making a feed horn... which is
>>> easy enough to do.
>>>
>>> What else could I do with this antenna? Other than covering it in
>>> polyethylene sheet to make a really big bird bath...
>>> --
>>> Dave Typinski
>>> AJ4CO
>>
>> Hi Dave
>>
>> NOAAPORT uses a satellite over the Equator, South of Texas to transmit
>>satellite images in near Real Time. You can easily build a station for
>>displaying good images of the Florida as seen from space.
>>
>> Jerry
>
> Now /that/ would be a cool project! Thanks, Jerry.
> --
> Dave Typinski
> AJ4CO

Hi Dave

If you do build a system for receiving the NOAAPORT images, please keep me
informed about your progress.
I too got my dish free. The PCI card TV receiver was low cost. The rest
is computer and software. eBay is a good source of very good antenna parts
at low cost.
I am presently stuck due to my poor Linux skills, and Linux is used by the

guys who write the software (free).

Jerry

2584. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 18:31:00 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <EVMSi.1116$0l4.996@trnddc08>
Source record: 35215

"Dave Typinski" <nospam@nospam.net> wrote in message
news:ac3nh31om4h7gvb2h4ff7131nqbuqccuik@4ax.com...
> On Sun, 21 Oct 2007 11:39:12 +0100, Highland Ham
> <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:
>
>>Dave Typinski wrote:
>>> Anyone have any ideas about what one might do with a television
>>> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>>> for the price of dismantling it and hauling it out of the present
>>> owner's back yard.
>>>
>>> I'm thinking radio astronomy. Might be nice to make my own radio map
>>> of the galaxy. I'm guessing that this would work okay somewhere
>>> between 1 and 10 GHz... which means making a feed horn... which is
>>> easy enough to do.
>>>
>>> What else could I do with this antenna? Other than covering it in
>>> polyethylene sheet to make a really big bird bath...
>>>==========
>>Possible usage:
>>1) EME amateur comms
>>2) WiFi low power experiments (provided there is line of sight freedom)
>>I remember having seen a web site with reports (incl photographs) that
>>some youngsters bridged a 125 km path using off the shelf equipment and
>>dishes having a size like yours.
>>
>>Hopefully you don't have just the dish but also a mounting pedestal and
>>perhaps even a motorised system .
>>
>>Frank GM0CSZ / KN6WH
>
> Yep, got the pedestal and the azimuth drive motor.
>
> 125 km at 2.4 GHz? How's that work? What were they bouncing the
> signal off of? That's definitely further than line of sight.
> --
> Dave Typinski
> AJ4CO

Hi Dave

Evidently there are places in or near Venezuela that have line of sight
adequate to get WiFi over 380 km.

Jerry

2585. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 18:31:10 UTC
From: kb9rqz@amsat.org
Message-ID: <cn6nh393mldluthid97fpn56dsul2vc1bu@4ax.com>
Source record: 35216
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but google

posts from these sorucees are fakes
but till at least terranews is back running well I might use anyserver that comes to hand

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

2586. Re: "Balancing" versus "cancelling"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 18:48:58 UTC
From: Antonio Vernucci <vernucci@tin.it>
Message-ID: <471b9f1a$0$17949$4fafbaef@reader1.news.tin.it>
Source record: 35217

```
--
-----------------------------------------------------
Antonio Vernucci, I0JX US call: K0JX
50-MHz beacon: 50.004 KHz FSK 10W 5/8 vertical antenna
> reference
> to inductance CANCELLING capacitance.
> The operative word should be BALANCING and the difference is important

"inductance cancelling capacitance" is evidently an abbreviation for "cancelling
the effect of capacitance"

Your post reminds me of a guy who, when asked a glass of water, answered: but
there no glasses made of water....

73

Tony I0JX
```

2587. Stainless Hardware Lesson

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 19:50:08 UTC
From: Fred McKenzie <fmmck@aol.com>
Message-ID: <fmmck-055CC2.15500821102007@nntp.aioe.org>
Source record: 35218
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

I bought a used Hustler stainless steel ball mount with a spring at a recent hamfest. I installed it with a stainless steel Quick-Disconnect (QD2) screwed into the top of the spring. I found that the spring was extremely weak, and suspect it is not the original spring from Hustler.

I removed the spring and attempted to screw the bottom piece of the QD2 into the ball mount. It started OK, but wouldn't quite screw all the way in. Then when trying to remove it, it came out about half way and seized-up. I'm sure it wasn't cross-threaded to begin with, since it went in several turns without using the wrench.

Although it was hard to turn, I persisted until the QD2 started to turn more easily. Then I realized that the piece it was screwed into was also turning!

Does anyone have any suggestions on how to undo the seized parts? (Penetrating oil and freezing the parts didn't make any difference.)

Fred
K4DII

2588. Coorection: DVB-t (UHF) log periodic

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 20:11:36 UTC
From: luc o <luco53@hotmail.com>
Message-ID: <Xns99D0E1C2E53E1luco53hotmailcom@194.134.69.69>
Source record: 35219

```
...of course it had to be UHF...
```

2589. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 20:38:21 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99D08AC2AA3BHuckleberryREMOVEbig@198.186.192.196>
Source record: 35220

>>> Anyone have any ideas about what one might do with a television
>>> receive-only (TVRO) antenna? The thing is 10' diameter and it's
>>> mine for the price of dismantling it and hauling it out of the
>>> present owner's back yard.

First thing that comes to my mind is EME.

Ed K7AAT

2590. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 21:07:10 UTC
From: Bob <bobsakol@hotmail.com>
Message-ID: <2afa3$471bbf86$4c0a8b1a$30594@TEKSAVVY.COM-Free>
Source record: 35221

"Dave Typinski" <nospam@nospam.net> wrote in message
news:ac3nh31om4h7gvb2h4ff7131nqbuqccuik@4ax.com...
> On Sun, 21 Oct 2007 11:39:12 +0100, Highland Ham
> <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:
>
>>Dave Typinski wrote:
>>> Anyone have any ideas about what one might do with a television
>>> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>>> for the price of dismantling it and hauling it out of the present
>>> owner's back yard.
>>>
>>> I'm thinking radio astronomy. Might be nice to make my own radio map
>>> of the galaxy. I'm guessing that this would work okay somewhere
>>> between 1 and 10 GHz... which means making a feed horn... which is
>>> easy enough to do.
>>>
>>> What else could I do with this antenna? Other than covering it in
>>> polyethylene sheet to make a really big bird bath...
>>>==========
>>Possible usage:
>>1) EME amateur comms
>>2) WiFi low power experiments (provided there is line of sight freedom)
>>I remember having seen a web site with reports (incl photographs) that
>>some youngsters bridged a 125 km path using off the shelf equipment and
>>dishes having a size like yours.
>>
>>Hopefully you don't have just the dish but also a mounting pedestal and
>>perhaps even a motorised system .
>>
>>Frank GM0CSZ / KN6WH
>
> Yep, got the pedestal and the azimuth drive motor.
>
> 125 km at 2.4 GHz? How's that work? What were they bouncing the
> signal off of? That's definitely further than line of sight.
> --
> Dave Typinski
> AJ4CO

Hi, here is link:
http://hardware.slashdot.org/article.pl?sid=05/08/01/1013218&from=rss

2591. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 21:15:43 UTC
From: Bob <bobsakol@hotmail.com>
Message-ID: <92f9e$471bc187$4c0a8b1a$31152@TEKSAVVY.COM-Free>
Source record: 35222

```
"Dave Typinski" <nospam@nospam.net> wrote in message
news:d54nh31vj604a1ilkf8igs1kggfb2jes4m@4ax.com...
> On Sun, 21 Oct 2007 16:48:28 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
>>
>>"Dave Typinski" <nospam@nospam.net> wrote in message
>>news:healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com...
>>> Anyone have any ideas about what one might do with a television
>>> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>>> for the price of dismantling it and hauling it out of the present
>>> owner's back yard.
>>>
>>> I'm thinking radio astronomy. Might be nice to make my own radio map
>>> of the galaxy. I'm guessing that this would work okay somewhere
>>> between 1 and 10 GHz... which means making a feed horn... which is
>>> easy enough to do.
>>>
>>> What else could I do with this antenna? Other than covering it in
>>> polyethylene sheet to make a really big bird bath...
>>> --
>>> Dave Typinski
>>> AJ4CO
>>
>> Hi Dave
>>
>> NOAAPORT uses a satellite over the Equator, South of Texas to transmit
>>satellite images in near Real Time. You can easily build a station for
>>displaying good images of the Florida as seen from space.
>>
>> Jerry
>
> Now /that/ would be a cool project! Thanks, Jerry.
> --
> Dave Typinski
> AJ4CO

http://hardware.slashdot.org/article.pl?sid=03/09/23/1233219
```

2592. Re: Stainless Hardware Lesson

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 21:32:11 UTC
From: Dave <noone@nowhere.com>
Message-ID: <vzPSi.1085$Y23.34@trndny04>
Source record: 35223
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

"Fred McKenzie" <fmmck@aol.com> wrote in message
news:fmmck-055CC2.15500821102007@nntp.aioe.org...
>I bought a used Hustler stainless steel ball mount with a spring at a
> recent hamfest. I installed it with a stainless steel Quick-Disconnect
> (QD2) screwed into the top of the spring. I found that the spring was
> extremely weak, and suspect it is not the original spring from Hustler.
>
> I removed the spring and attempted to screw the bottom piece of the QD2
> into the ball mount. It started OK, but wouldn't quite screw all the
> way in. Then when trying to remove it, it came out about half way and
> seized-up. I'm sure it wasn't cross-threaded to begin with, since it
> went in several turns without using the wrench.
>
> Although it was hard to turn, I persisted until the QD2 started to turn
> more easily. Then I realized that the piece it was screwed into was
> also turning!
>
> Does anyone have any suggestions on how to undo the seized parts?
> (Penetrating oil and freezing the parts didn't make any difference.)
>
> Fred
> K4DII

nope, they are probably 'galled'. a condition that happens when you put
together two unlubricated stainless steel parts. essentially the pressure
of rubbing has spot welded the pieces together. this condition does not
respond to penetrating oils and other normal methods since the parts are not
rusted or dirty.

2593. Re: Stainless Hardware Lesson

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 21:51:26 UTC
From: Nick <a@b.com>
Message-ID: <yRPSi.14705$qv1.13822@newsfe2-gui.ntli.net>
Source record: 35224
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

>>
>> Does anyone have any suggestions on how to undo the seized parts?
>> (Penetrating oil and freezing the parts didn't make any difference.)
>>
>> Fred
>> K4DII
>
> nope, they are probably 'galled'. a condition that happens when you put
> together two unlubricated stainless steel parts. essentially the pressure
> of rubbing has spot welded the pieces together. this condition does not
> respond to penetrating oils and other normal methods since the parts are
> not rusted or dirty.

Unfortunately I would also say this is what has happened - I had the same experience with new replacement stainless bolts
on my bike - great, I thought, fit and forget, except when I was halfway through installing the first bolt I had to take it out and it seemed unusually stiff. I HAD to get it out so slow extreme force was eventually applied even if it stripped things, but it came out - a call to the supplier confirmed it must always be used with copperslip grease or similar to stop this very problem occurring.

I think the only solution may be force but very slowly to minimise heat causing more spot welds, else it will be a spark eroder or similar drastic action

Nick

2594. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 22:02:36 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <471bcc78$0$25659$4c368faf@roadrunner.com>
Source record: 35225

"Dave Typinski" <nospam@nospam.net> wrote in message
news:sc2nh3drjnt2cegf9igomi60gtp3fs047r@4ax.com...
> On Sun, 21 Oct 2007 01:01:19 -0400, "Jimmie D"
> <GFENDER@carolina.rr.com> wrote:
>>
>>"Dave Typinski" <nospam@nospam.net> wrote in message
>>news:healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com...
>>> Anyone have any ideas about what one might do with a television
>>> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>>> for the price of dismantling it and hauling it out of the present
>>> owner's back yard.
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>>> I'm thinking radio astronomy. Might be nice to make my own radio map
>>> of the galaxy. I'm guessing that this would work okay somewhere
>>> between 1 and 10 GHz... which means making a feed horn... which is
>>> easy enough to do.
>>>
>>> What else could I do with this antenna? Other than covering it in
>>> polyethylene sheet to make a really big bird bath...
>>> --
>>> Dave Typinski
>>> AJ4CO
>>
>>I know of a couple of guys that took two of them, one for rx and one for
>>tx,
>>tx was a microwave oven mgnetron. He and his frined talked to each other
>>via
>>troposcatter. I do know if a maggie operates within a ham band or not but
>>it
>>didnt matter too much for these guys because they didnt have a ticket
>>anyway.
>>
>>Jimmie
>
> I thought about magnetrons... but not for communication. My idea is
> to set it up as a radar station to measure the distance to the Moon. A
> microwave oven magnetron operates at 2450 MHz, which is right at the
> upper edge of the 13cm ham band. Unfortunately, magnetrons produce a
> really dirty, wide output. Worse, being right at the edge of the
> band, half the RF energy would be out of band.
>
> I don't know if one can re-tune a magnetron by the addition of
> external components; I'd like to get the thing down to 2.42 GHz to put
> the emission in the center of the 13cm band. There are such things as

> tunable magnetrons; but, they aren't found in microwave ovens, which
> means they won't likely be had for free.
>
> That said, I'd sure like to look at the output from an oven magnetron
> with a spectrum analyzer. Maybe the output isn't as dirty and wide as
> I think it is.
> --
> Dave Typinski
> AJ4CO

A good power supply may clean things up a lot. I think you can rubber the frequency a bit by adjusting the B voltage and even the filament current. I think even the strength of the magnetic field effects it some.

Jimmie

2595. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 22:18:07 UTC
From: et472@FreeNet.Carleton.CA
Message-ID: <ffgj6v$6pv$1@theodyn.ncf.ca>
Source record: 35226

Dave Typinski (nospam@nospam.net) writes:
> On Sun, 21 Oct 2007 01:01:19 -0400, "Jimmie D"
> <GFENDER@carolina.rr.com> wrote:
>>
>>"Dave Typinski" <nospam@nospam.net> wrote in message
>>news:healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com...
>>> Anyone have any ideas about what one might do with a television
>>> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>>> for the price of dismantling it and hauling it out of the present
>>> owner's back yard.
>>>
>>> I'm thinking radio astronomy. Might be nice to make my own radio map
>>> of the galaxy. I'm guessing that this would work okay somewhere
>>> between 1 and 10 GHz... which means making a feed horn... which is
>>> easy enough to do.
>>>
>>> What else could I do with this antenna? Other than covering it in
>>> polyethylene sheet to make a really big bird bath...
>>> --
>>> Dave Typinski
>>> AJ4CO
>>
>>I know of a couple of guys that took two of them, one for rx and one for tx,
>>tx was a microwave oven mgnetron. He and his frined talked to each other via
>>troposcatter. I do know if a maggie operates within a ham band or not but it
>>didnt matter too much for these guys because they didnt have a ticket
>>anyway.
>>
>>Jimmie
>
> I thought about magnetrons... but not for communication. My idea is
> to set it up as a radar station to measure the distance to the Moon. A
> microwave oven magnetron operates at 2450 MHz, which is right at the
> upper edge of the 13cm ham band. Unfortunately, magnetrons produce a
> really dirty, wide output. Worse, being right at the edge of the
> band, half the RF energy would be out of band.
>
How do you think the higher bands were conquered? It was always with
simple equipment that was cheap and easy (relative speaking), with
the more serious work coming later.

So before WWII, it was modulated oscillators and superregen receivers
on 56MHz and 112MHz. After the war, new equipment was available, and
there was a desire for pushing the limits (and laws came in at some

point to require better signals), and there was a move to crystal controlled transmitters and better receivers. Well, they really went together, since if you changed one, the other had to follow.

So that equipment got pushed up further, helping to stake out 220MHz and 420MHz. A lot of work was done on the 1215MHz band after WWII and even through the early sixties with the venerable APX/6 (I suddenly realize I may have gotten that wrong), which was a modulated oscillator for the transmitter, and it was often debated whether it was amplitude of requency modulated. The receiver was a superhet, but had a nice broad IF bandwidth, so it didn't matter how much the transmitter drifted. I seem to recall that the APX/6 was intended as an IFF unit, it gets triggered by radar and identifies itself as a friend, so nobody shoots at the airplane.

Newer techniques came along, more desire to push the limits, and that sort of thing was slowly phased out on the band.

But hey, it moved further up. In the late seventies, a lot of hams played with the 10,000MHz, using garage door openers, modulated oscillators and broadband receivers.

The further you go up in frequency, the more such cheap and simple equipment can be tolerated, since the bands get wider (well, until they get narrowed as bits are allocated away from amateur radio). So there is long history of both wideband simple equipment and narrowband DX'ing going on at the same time, albeit at opposite ends of the band.

But in reality, you dig up that article that was in "73" years ago that was about adding a phase locked loop to a microwave oven, which gives a nice narrow signal.

Michael VE2BVW

2596. Re: Stainless Hardware Lesson

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 22:35:31 UTC
From: Jeff Liebermann <jeffl@cruzio.com>
Message-ID: <evjnh31q5timluiv60tjaa97a07oio31lo@4ax.com>
Source record: 35227
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

Fred McKenzie <fmmck@aol.com> hath wroth:

>I bought a used Hustler stainless steel ball mount with a spring at a
>recent hamfest. I installed it with a stainless steel Quick-Disconnect
>(QD2) screwed into the top of the spring. I found that the spring was
>extremely weak, and suspect it is not the original spring from Hustler.
>
>I removed the spring and attempted to screw the bottom piece of the QD2
>into the ball mount. It started OK, but wouldn't quite screw all the
>way in. Then when trying to remove it, it came out about half way and
>seized-up. I'm sure it wasn't cross-threaded to begin with, since it
>went in several turns without using the wrench.
>
>Although it was hard to turn, I persisted until the QD2 started to turn
>more easily. Then I realized that the piece it was screwed into was
>also turning!
>
>Does anyone have any suggestions on how to undo the seized parts?
>(Penetrating oil and freezing the parts didn't make any difference.)

Congratulations and welcome to galling. What you've done is
inadvertently scrape off the protective oxide coatings from both
pieces and welded them together. Next time, try some anti-seize goop
in the threads. Incidentally, you can have the same galling problem
with aluminum and titanium.

You're correct that oil won't do anything useful. However, freezing
should work. Clean off as much oil as you can remove with some
solvent. Find someone that has liquid nitrogen. If that's difficult,
some dry ice. Freeze only the bolt, not the ball mount. A bolt that
size will take some time to shrink, so you may need to freeze it for
some time. My guess(tm) is about 2 hours. You could also warm up the
ball mount end, but it's probably not necessary. When the bolt is
nice and cold, do the brute force trick again. Don't beat on it with
a hammer or impact wrench as you're likely to shatter the bolt.

Another way is simple brute force. Build some custom vice jaws and
lock the ball mount in place. Flatten the sides of the bolt and
attack it with a big wrench and "torque amplifier" (steel pipe over
wrench handle). Beat on it with a hammer if necessary.

Another alternative is to just leave it as is. It's now a permanent
part of the ball mount. If it's sticking out too far, cut it back to
a usable length or install a threaded sleeve between the ball mount
and QD2 disconnect.

--
Jeff Liebermann jeffl@cruzio.com
150 Felker St #D http://www.LearnByDestroying.com
Santa Cruz CA 95060 http://802.11junk.com
Skype: JeffLiebermann AE6KS 831-336-2558

2597. Re: Stainless Hardware Lesson

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 22:59:30 UTC
From: PeterD <peter2@hipson.net>
Message-ID: <j6mnh3do602chrip29vhocrk0jo6a2ossj@4ax.com>
Source record: 35228
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

On Sun, 21 Oct 2007 15:50:08 -0400, Fred McKenzie <fmmck@aol.com>
wrote:

>I bought a used Hustler stainless steel ball mount with a spring at a
>recent hamfest. I installed it with a stainless steel Quick-Disconnect
>(QD2) screwed into the top of the spring. I found that the spring was
>extremely weak, and suspect it is not the original spring from Hustler.
>
>I removed the spring and attempted to screw the bottom piece of the QD2
>into the ball mount. It started OK, but wouldn't quite screw all the
>way in. Then when trying to remove it, it came out about half way and
>seized-up. I'm sure it wasn't cross-threaded to begin with, since it
>went in several turns without using the wrench.
>
>Although it was hard to turn, I persisted until the QD2 started to turn
>more easily. Then I realized that the piece it was screwed into was
>also turning!
>
>Does anyone have any suggestions on how to undo the seized parts?
>(Penetrating oil and freezing the parts didn't make any difference.)
>

This is a relatively common problem with stainless. It will 'friction
weld' itself easily, and once that happens nothing seems to get it
apart. I've some interesting stainless bolts and nuts that this has
happened to, and have seen the effectiveness of the welding being
higher than the failure point of the bolt!

What is worse, it is difficult to predict when this will happen, but
it is important to use a stainless compatible anti-sieze compound on
stainless hardware.

I doubt you'll get it apart... If you want I can give you a picture of
a bolt end with a non-cross threaded nut--the bolt snapped rather than
the nut coming off (and it took a lot of work to break that bolt!)

You may have better success drilling it out, if that's an option.

2598. Re: 80m Vertical info

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-21 23:03:07 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13hnmld72m7hfaa@corp.supernews.com>
Source record: 35229

Steve wrote:
>
> Occasionally I'll listen to the online receiver made available by
> K2JEU (http://www.ralabs.com/webradio/). Over the years he has used
> various diffent antennas, ranging from longwires, to beams to most
> recently a roughly 75 ft sloper. However, at one point he was using
> 40+ vertical from zerofive and it was vastly superior to every other
> antenna I've see him use (excepting the beam, which doesn't belong in
> the same comparison class). I almost couldn't believe it. I'd have
> expected a large vertical to be pretty noisy, but the zerofive antenna
> was incredibly quiet. I don't have space for such an antenna myself,
> but I was awfully impressed with this one. It was really something.

Quietness isn't usually a good attribute of a receiving antenna. A dummy load is, after all, extremely quiet. Or do you mean that it had some magical property of separating the signal you wanted to listen to from all the others?

Roy Lewallen, W7EL

2599. mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 00:07:52 UTC
From: Ron in Radio Heaven <W4RON@Xcarolina.rr.com>
Message-ID: <471be9ff$0$32563$4c368faf@roadrunner.com>
Source record: 35230

I'm looking for a Texas Bugcatcher.
Anybody got one for sale?

73, W4RON

2600. Re: mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 00:24:48 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99D0B126E223CHuckleberryREMOVEbig@198.186.192.196>
Source record: 35231

> I'm looking for a Texas Bugcatcher.
> Anybody got one for sale?
>
> 73, W4RON
>

Don't have a Texas Bugcatcher antenna for you, but will offer some insight: You can find a good design for home brewing one at:

http://www.qsl.net/n1lo/antenna.htm

Scroll down to bottom and click on the 10 - 80M mobile vertical antenna. With these instructions, you should be able to build one that works even better than the original Texas Bugcatcher antenna. I did.

Ed K7AAT

2601. Re: 80m Vertical info

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 01:46:32 UTC
From: Steve <sdaniel13@speakeasy.net>
Message-ID: <1193017592.800009.102720@t8g2000prg.googlegroups.com>
Source record: 35232

On Oct 21, 7:03 pm, Roy Lewallen <w...@eznec.com> wrote:
> Steve wrote:
>
> > Occasionally I'll listen to the online receiver made available by
> > K2JEU (http://www.ralabs.com/webradio/). Over the years he has used
> > various diffent antennas, ranging from longwires, to beams to most
> > recently a roughly 75 ft sloper. However, at one point he was using
> > 40+ vertical from zerofive and it was vastly superior to every other
> > antenna I've see him use (excepting the beam, which doesn't belong in
> > the same comparison class). I almost couldn't believe it. I'd have
> > expected a large vertical to be pretty noisy, but the zerofive antenna
> > was incredibly quiet. I don't have space for such an antenna myself,
> > but I was awfully impressed with this one. It was really something.
>
> Quietness isn't usually a good attribute of a receiving antenna. A dummy
> load is, after all, extremely quiet. Or do you mean that it had some
> magical property of separating the signal you wanted to listen to from
> all the others?
>
> Roy Lewallen, W7EL

I doubt that it was a magical property, but it delivered more signal
and less noise than the other antennas he's used (at least while I've
been visiting his site). Hard to say what would explain it as many of
the details (grounds, radials, etc.) of his setup aren't set forth on
his website.

Steve
KC2SIZ

2602. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 02:49:21 UTC
From: Dave Typinski <nospam@nospam.net>
Message-ID: <5k3oh3pl4omulh2tvg0gala9j04o3i4a55@4ax.com>
Source record: 35233

```
On Sun, 21 Oct 2007 17:07:10 -0400, "Bob" <bobsakol@hotmail.com>
wrote:

>
>"Dave Typinski" <nospam@nospam.net> wrote in message
>news:ac3nh31om4h7gvb2h4ff7131nqbuqccuik@4ax.com...
>> On Sun, 21 Oct 2007 11:39:12 +0100, Highland Ham
>> <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:
>>
>>>Dave Typinski wrote:
>>>> Anyone have any ideas about what one might do with a television
>>>> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>>>> for the price of dismantling it and hauling it out of the present
>>>> owner's back yard.
>>>>
>>>> I'm thinking radio astronomy. Might be nice to make my own radio map
>>>> of the galaxy. I'm guessing that this would work okay somewhere
>>>> between 1 and 10 GHz... which means making a feed horn... which is
>>>> easy enough to do.
>>>>
>>>> What else could I do with this antenna? Other than covering it in
>>>> polyethylene sheet to make a really big bird bath...
>>>==================================
>>>Possible usage:
>>>1) EME amateur comms
>>>2) WiFi low power experiments (provided there is line of sight freedom)
>>>I remember having seen a web site with reports (incl photographs) that
>>>some youngsters bridged a 125 km path using off the shelf equipment and
>>>dishes having a size like yours.
>>>
>>>Hopefully you don't have just the dish but also a mounting pedestal and
>>>perhaps even a motorised system .
>>>
>>>Frank GM0CSZ / KN6WH
>>
>> Yep, got the pedestal and the azimuth drive motor.
>>
>> 125 km at 2.4 GHz? How's that work? What were they bouncing the
>> signal off of? That's definitely further than line of sight.
>> --
>> Dave Typinski
>> AJ4CO
>
>Hi, here is link:
```

>http://hardware.slashdot.org/article.pl?sid=05/08/01/1013218&from=rss

Aha! Living in Florida for the last 15 years has made me forget about
the mountains out west. Yes, you can definitely go line of sight up
to a few hundred miles if you have at your disposal an assortment of
mile-high piles of rocks upon which to mount the antennas.
http://www.wifi-toys.com/wi-fi.php?a=articles&id=91

--
Dave Typinski
AJ4CO

2603. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 02:57:39 UTC
From: Dave Typinski <nospam@nospam.net>
Message-ID: <kv3oh3ltlq4sg6vl3gtdfv1nkue4ms3a4i@4ax.com>
Source record: 35234

```
On Sun, 21 Oct 2007 18:15:48 GMT, "Jerry Martes"
<j.jmartes@verizon.net> wrote:

>
>"Dave Typinski" <nospam@nospam.net> wrote in message
>news:d54nh31vj604a1ilkf8igs1kggfb2jes4m@4ax.com...
>> On Sun, 21 Oct 2007 16:48:28 GMT, "Jerry Martes"
>> <j.jmartes@verizon.net> wrote:
>>
>>>
>>>"Dave Typinski" <nospam@nospam.net> wrote in message
>>>news:healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com...
>>>> Anyone have any ideas about what one might do with a television
>>>> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>>>> for the price of dismantling it and hauling it out of the present
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>>>> What else could I do with this antenna? Other than covering it in
>>>> polyethylene sheet to make a really big bird bath...
>>>> --
>>>> Dave Typinski
>>>> AJ4CO
>>>
>>> Hi Dave
>>>
>>> NOAAPORT uses a satellite over the Equator, South of Texas to transmit
>>>satellite images in near Real Time. You can easily build a station for
>>>displaying good images of the Florida as seen from space.
>>>
>>> Jerry
>>
>> Now /that/ would be a cool project! Thanks, Jerry.
>> --
>> Dave Typinski
>> AJ4CO
>
> Hi Dave
>
> If you do build a system for receiving the NOAAPORT images, please keep me
```

>informed about your progress.
> I too got my dish free. The PCI card TV receiver was low cost. The rest
>is computer and software. eBay is a good source of very good antenna parts
>at low cost.
> I am presently stuck due to my poor Linux skills, and Linux is used by the
>guys who write the software (free).
>
> Jerry

I briefly went over the NOAAPORT web site. Looks like they have a
Windows flavor for the software, or maybe that's just a port to a
version that runs under a Windows emulator for Linux. Dunno. The
site wasn't too user-friendly - which just makes me want to build the
thing even more.

If you have any other online references handy for this project, I'd be
much obliged if you'd post them. For instance, in my review of the
site, I didn't notice anything about having to use a video capture /
TV tuner card - although I do have a USB version of one of those.

I shall post my progress, if and when. It's a project that's not at
the top of the list. First up is launching a weather balloon to
100,000 feet with a camera and a few sensors.

Thanks, Jerry.
--
Dave Typinski
AJ4CO

2604. Re: Stainless Hardware Lesson

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 03:00:40 UTC
From: Mike Coslo <mcoslo@youknow.comcast.net>
Message-ID: <Xns99D0EA525C7FEmcoslocomcastnet@216.196.97.136>
Source record: 35235
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

Fred McKenzie <fmmck@aol.com> wrote in news:fmmck-055CC2.15500821102007
@nntp.aioe.org:

> I bought a used Hustler stainless steel ball mount with a spring at a
> recent hamfest. I installed it with a stainless steel Quick-Disconnect
> (QD2) screwed into the top of the spring. I found that the spring was
> extremely weak, and suspect it is not the original spring from Hustler.
>
> I removed the spring and attempted to screw the bottom piece of the QD2
> into the ball mount. It started OK, but wouldn't quite screw all the
> way in. Then when trying to remove it, it came out about half way and
> seized-up. I'm sure it wasn't cross-threaded to begin with, since it
> went in several turns without using the wrench.
>
> Although it was hard to turn, I persisted until the QD2 started to turn
> more easily. Then I realized that the piece it was screwed into was
> also turning!
>
> Does anyone have any suggestions on how to undo the seized parts?
> (Penetrating oil and freezing the parts didn't make any difference.)

When dealing with frozen parts, I use a torch to heat the parts up (if
they and their nearby parts will stand the abuse. Get 'em good and hot -
a red glow is not too hot - and back the screw out.

The obvious disclaimers as to the dangers of this method, such as red hot
metal burning things, and "Don't try this at home, kids!" apply.

- 73 de Mike KB3EIA -

2605. Testing earth stake efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 03:04:06 UTC
From: JERD <jedunk@REMOVEbigpond.net.au>
Message-ID: <GqUSi.2846$CN4.2396@news-server.bigpond.net.au>
Source record: 35236

I am wondering if anyone can enlighten me on how to test ones earth stake efficiency?

The only item I am aware of goes back a real long way and that is the wind it yourself megga tester!

Any modern ways of doing it these days or does one just hope for the best!

Am using an 8 ft galvanized rod.

JERD
VK5JE

2606. Re: mobile antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 03:32:48 UTC
From: nm5k@wt.net
Message-ID: <1193023968.428574.143930@i13g2000prf.googlegroups.com>
Source record: 35237

On Oct 21, 7:24 pm, Ed G <Huckleberry_REMO...@bigvalley.net> wrote:

>
> Scroll down to bottom and click on the 10 - 80M mobile vertical
> antenna. With these instructions, you should be able to build one that
> works even better than the original Texas Bugcatcher antenna. I did.
>
> Ed K7AAT

I've been making em like that for years. It's a cheap way to get a
good
performing mobile antenna. They are also light, and require much less
sturdy mounts than the heavy all metal bugcatcher.
I don't use the capacity hat though.. Just a 5 ft whip over the coil.
My first one used a 5 ft CB whip. My latest one uses a 6 ft 20m
hamstick
as the glass mast. The coil takes about a ft of room at the top of the
stick,
so it comes out almost a perfect center load with 5 ft under the coil,
and
5 feet over it.
For industrial strength use when parked, I screw a 3 ft hustler mast
to the
base of the glass whip. That raises the coil to 8 ft above the base
and a 14 ft total height of the antenna.
Both of mine work all bands 80-10 using various coil taps, or
different
length stingers for the higher bands.
MK

2607. Re: Stainless Hardware Lesson

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 03:46:50 UTC
From: **THE-RFI-EMI-GUY** <rhyolite@nettally.com>
Message-ID: <471C1D2A.1080707@nettally.com>
Source record: 35238
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

Heat the ball mount with a torch to cause it to expand and melt some
candle wax into the threads as a lubricant (watch for fire). I don't
think you need red hot, just get the mount to expand enough to break the
bond and apply force to turn the QD threads.

Fred McKenzie wrote:

>I bought a used Hustler stainless steel ball mount with a spring at a
>recent hamfest. I installed it with a stainless steel Quick-Disconnect
>(QD2) screwed into the top of the spring. I found that the spring was
>extremely weak, and suspect it is not the original spring from Hustler.
>
>I removed the spring and attempted to screw the bottom piece of the QD2
>into the ball mount. It started OK, but wouldn't quite screw all the
>way in. Then when trying to remove it, it came out about half way and
>seized-up. I'm sure it wasn't cross-threaded to begin with, since it
>went in several turns without using the wrench.
>
>Although it was hard to turn, I persisted until the QD2 started to turn
>more easily. Then I realized that the piece it was screwed into was
>also turning!
>
>Does anyone have any suggestions on how to undo the seized parts?
>(Penetrating oil and freezing the parts didn't make any difference.)
>
>Fred
>K4DII
>
>

--
Joe Leikhim K4SAT
"The RFI-EMI-GUY"ï¿½

"Treason doth never prosper: what's the reason?
For if it prosper, none dare call it treason."

"Follow The Money" ;-P

2608. Re: New antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 03:56:36 UTC
From: nm5k@wt.net
Message-ID: <1193025396.405803.217700@i13g2000prf.googlegroups.com>
Source record: 35239

On Oct 20, 9:52 pm, art <aun...@insightbb.com> wrote:

>
> With 2 4 foot square alum panels 4 foot apart with circular
> polarised 160M antenna in the capacitive field.All bands were S0
> with 160M very active with strong signals. Could hear noise
> and some static crashes from a distance but none that
> affected S meter position. Early days yet but would appear I am
> duplicating lower antenna of a stack since the S meter was at
> rest when no signal present.
> Art Unwin KB9MZ

Sounds fairly grim if you plan to transmit using that device..
Lots of loss somewhere. :(
This is not a good development, being this seems to be the
second faulty unit you have produced in row.
Or should I say stack...
Please reboot and try again.
MK

2609. Re: Stainless Hardware Lesson

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 04:44:56 UTC
From: Fred McKenzie <fmmck@aol.com>
Message-ID: <fmmck-053A9C.00445422102007@nntp.aioe.org>
Source record: 35240
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

In article <471C1D2A.1080707@nettally.com>,
THE-RFI-EMI-GUY <rhyolite@nettally.com> wrote:

> Heat the ball mount with a torch to cause it to expand and melt some
> candle wax into the threads as a lubricant (watch for fire). I don't
> think you need red hot, just get the mount to expand enough to break the
> bond and apply force to turn the QD threads.

Joe & All-

Thanks for the information and suggestions. I understand stainless is a poor conductor of heat. I might try a combination of freezing the parts and then using a torch on the outer piece to increase the temperature differential.

The female threads may have been tapped prior to crimping that piece to the top shell of the ball, and the crimping process could have distorted the threads near the crimp. If I had known about the likelihood of "galling", I might have tried re-tapping the threads prior to installing the QD.

Fred
K4DII

2610. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 05:06:59 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <TdWSi.1173$0l4.697@trnddc08>
Source record: 35141

```
"Dave Typinski" <nospam@nospam.net> wrote in message
news:kv3oh3ltlq4sg6vl3gtdfv1nkue4ms3a4i@4ax.com...
> On Sun, 21 Oct 2007 18:15:48 GMT, "Jerry Martes"
> <j.jmartes@verizon.net> wrote:
>
>>
>>"Dave Typinski" <nospam@nospam.net> wrote in message
>>news:d54nh31vj604a1ilkf8igs1kggfb2jes4m@4ax.com...
>>> On Sun, 21 Oct 2007 16:48:28 GMT, "Jerry Martes"
>>> <j.jmartes@verizon.net> wrote:
>>>
>>>>
>>>>"Dave Typinski" <nospam@nospam.net> wrote in message
>>>>news:healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com...
>>>>> Anyone have any ideas about what one might do with a television
>>>>> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>>>>> for the price of dismantling it and hauling it out of the present
>>>>> owner's back yard.
>>>>>
>>>>> I'm thinking radio astronomy. Might be nice to make my own radio map
>>>>> of the galaxy. I'm guessing that this would work okay somewhere
>>>>> between 1 and 10 GHz... which means making a feed horn... which is
>>>>> easy enough to do.
>>>>>
>>>>> What else could I do with this antenna? Other than covering it in
>>>>> polyethylene sheet to make a really big bird bath...
>>>>> --
>>>>> Dave Typinski
>>>>> AJ4CO
>>>>
>>>> Hi Dave
>>>>
>>>> NOAAPORT uses a satellite over the Equator, South of Texas to transmit
>>>>satellite images in near Real Time. You can easily build a station for
>>>>displaying good images of the Florida as seen from space.
>>>>
>>>> Jerry
>>>
>>> Now /that/ would be a cool project! Thanks, Jerry.
>>> --
>>> Dave Typinski
>>> AJ4CO
>>
>> Hi Dave
```

>>
>> If you do build a system for receiving the NOAAPORT images, please keep
>> me
>>informed about your progress.
>> I too got my dish free. The PCI card TV receiver was low cost. The rest
>>is computer and software. eBay is a good source of very good antenna
>>parts
>>at low cost.
>> I am presently stuck due to my poor Linux skills, and Linux is used by
>> the
>>guys who write the software (free).
>>
>> Jerry
>
> I briefly went over the NOAAPORT web site. Looks like they have a
> Windows flavor for the software, or maybe that's just a port to a
> version that runs under a Windows emulator for Linux. Dunno. The
> site wasn't too user-friendly - which just makes me want to build the
> thing even more.
>
> If you have any other online references handy for this project, I'd be
> much obliged if you'd post them. For instance, in my review of the
> site, I didn't notice anything about having to use a video capture /
> TV tuner card - although I do have a USB version of one of those.
>
> I shall post my progress, if and when. It's a project that's not at
> the top of the list. First up is launching a weather balloon to
> 100,000 feet with a camera and a few sensors.
>
> Thanks, Jerry.
> --
> Dave Typinski
> AJ4CO

Hi Dave

Hector has most of what is needed to make a low cost PCI TV receiver work
for NOAAPORT. The Twinhan PCI cards are affordable thru eBay and etc.
I thought I'd get more help from the "regulars" on the Yahoo NOAAPORT
site, but am now disappointed. And, I am slow to learn the Linux (Fedora)
that is used to reduce the data.
I want you to learn how to make images so you can teach me. I did go out
and buy parts and assembled a computer for Fedora. Now I have to learn how
to navigate in it. I too have found the"instructions" a bit difficult for
me to understand. But, Hector's instructions
(http://www.hwic.net/projects/weather/noaaport/) are quite direct and
easy to understand.

Jerry

2611. Re: Testing earth stake efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 10:48:48 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <pIGdnen99pRk4oHaRVnyiQA@bt.com>
Source record: 35142

"JERD" <jedunk@REMOVEbigpond.net.au> wrote in message
news:GqUSi.2846$CN4.2396@news-server.bigpond.net.au...
>I am wondering if anyone can enlighten me on how to test ones earth stake
>efficiency?
>
> The only item I am aware of goes back a real long way and that is the wind
> it yourself megga tester!
>
> Any modern ways of doing it these days or does one just hope for the best!
>
> Am using an 8 ft galvanized rod.
>
> JERD
> VK5JE
>
>
JERD

There is a specific instrument called a three terminal earth impedence meter used to measure earth impedence. Three electrodes are driven into the ground at set distances and the earth impedence is measured directly by the meter.

This equipment is intended to ensure that a sufficiently low impedence exists for safety electrical earth connections to operate fuse, circuit breaker or residual current devices reliably. Most professional electricians will have such a device (or at least know where they can get hold of one).

An earth connection that is satisfactory for electrical supply safety purposes may not necessarily be adequate for RF use.

Mike G0ULI

2612. Re: DVB-t (UFH) log periodic question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 11:46:25 UTC
From: "Helmut Wabnig"
Message-ID: <sv2ph3h3a3ddvnq99afv65osjfo86opgvp@4ax.com>
Source record: 35143

On 21 Oct 2007 16:14:06 GMT, luc o <> wrote:

>Hi!
>
>I want to design and build a log periodic for DVB-T and I've found
>'LOGPERIO.XLS', a calculation program in Excel format.
>
>Anyone tried this or have experiences with it?
>All comments and suggestions are welcome!
>
>
>Thanx,
>
>Luc
When nobody else comments, I do.

Yes, I actually bult several LPDAs from the LOGPERIO
calculations and they work perfectly

Caution:
Each LPDA has certain Z variations over the
whole frequency range.
1 : 1.7 is very well done.....! 1:2 is still good.

Do you have the LOGPERIO version with the
antenna graph display?
http://members.aon.at/hwabnig/
w.

2613. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 13:50:45 UTC
From: "Autymn D. C." <lysdexia@sbcglobal.net>
Message-ID: <1193061045.110714.76130@q3g2000prf.googlegroups.com>
Source record: 35144
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

On Oct 10, 1:30 pm, Benj <bjac...@iwaynet.net> wrote:
> So if you were to take a viewpoint high above the matrix observing a
> consciousness inscribing it's path through life, to you you'd

What does "it is path" mean, illiterate shithead!!?

> But of course none of this answers the most important question which
> is what do 2 GHz AM signals in space sound like? I believe the answer
> is that they sound just like the Venusian signals Adamski received
> from the beamships right before they appeared!

why before? why not behind?

2614. Re: Receiving 2 GHz AM signals in space. What do they sound like?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 14:02:02 UTC
From: "Autymn D. C." <lysdexia@sbcglobal.net>
Message-ID: <1193061722.021670.104140@t8g2000prg.googlegroups.com>
Source record: 35145
Cross-posted to: rec.radio.amateur.antenna,sci.physics,sci.energy,sci.physics.electromag

On Oct 12, 11:44 am, oriel36 <kelleher.ger...@gmail.com> wrote:
> Ah,who am I kidding,you are into warped space.time travel ect and who
> knows what else.

ect?

http://google.com/groups?q=Autymn+time-travel

Size and farness in spase are the same entity; there is no matter
without them. So warped size is the same as one component of warped
matter, in the potential-span relations.

2615. Re: Testing earth stake efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 15:08:16 UTC
From: JERD <jedunk@REMOVEbigpond.net.au>
Message-ID: <A13Ti.3114$CN4.600@news-server.bigpond.net.au>
Source record: 35147

"Mike Kaliski" <michael.kaliski@tesco.net> wrote in message
news:pIGdnen99pRk4oHaRVnyiQA@bt.com...
>
> "JERD" <jedunk@REMOVEbigpond.net.au> wrote in message
> news:GqUSi.2846$CN4.2396@news-server.bigpond.net.au...
>>I am wondering if anyone can enlighten me on how to test ones earth stake
>>efficiency?

> An earth connection that is satisfactory for electrical supply safety
> purposes may not necessarily be adequate for RF use.
>
> Mike G0ULI

Mike, can you please elaborate on this last sentence for me please?

JERD

2616. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 17:02:57 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ffil41$4pi$1@news.jpl.nasa.gov>
Source record: 35151

Dave Typinski wrote:
> On Sun, 21 Oct 2007 01:01:19 -0400, "Jimmie D"
> <GFENDER@carolina.rr.com> wrote:
>
>>"Dave Typinski" <nospam@nospam.net> wrote in message
>>news:healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com...
>>
>>>Anyone have any ideas about what one might do with a television
>>>receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>>>for the price of dismantling it and hauling it out of the present
>>>owner's back yard.
>>>
>>>I'm thinking radio astronomy. Might be nice to make my own radio map
>>>of the galaxy. I'm guessing that this would work okay somewhere
>>>between 1 and 10 GHz... which means making a feed horn... which is
>>>easy enough to do.
>>>
>>>What else could I do with this antenna? Other than covering it in
>>>polyethylene sheet to make a really big bird bath...
>>>--
>>>Dave Typinski
>>>AJ4CO
>>
>>I know of a couple of guys that took two of them, one for rx and one for tx,
>>tx was a microwave oven mgnetron. He and his frined talked to each other via
>>troposcatter. I do know if a maggie operates within a ham band or not but it
>>didnt matter too much for these guys because they didnt have a ticket
>>anyway.
>>
>>Jimmie
>
>
> I thought about magnetrons... but not for communication. My idea is
> to set it up as a radar station to measure the distance to the Moon. A
> microwave oven magnetron operates at 2450 MHz, which is right at the
> upper edge of the 13cm ham band. Unfortunately, magnetrons produce a
> really dirty, wide output. Worse, being right at the edge of the
> band, half the RF energy would be out of band.

Just how precise a measurement do you want to make? You could do quite
well using a 100W 2m SSB rig and a decent yagi antenna and some signal
processing software.

See, e.g. http://home.earthlink.net/~n5bf/eme2.html

>
> I don't know if one can re-tune a magnetron by the addition of
> external components; I'd like to get the thing down to 2.42 GHz to put
> the emission in the center of the 13cm band. There are such things as
> tunable magnetrons; but, they aren't found in microwave ovens, which
> means they won't likely be had for free.
>
> That said, I'd sure like to look at the output from an oven magnetron
> with a spectrum analyzer. Maybe the output isn't as dirty and wide as
> I think it is.

it is quite dirty, even more so in an oven because:
1) it's fed by a half wave voltage doubler, so it's pulsed at line frequency
2) the voltage waveform is hardly nice and regulated
3) the temperature of the tube changes during operation

Why not build/buy some small no-tune transverters for 3.4 or 5.7 GHz and
use those. At least then, you can do coherent processing over some
reasonable time span, and what you lose in raw pulse power, you pick up
in processing gain.

The beamwidth of your 10ft dish at 2.4 GHz is going to be pretty wide,
so you're illuminating a lot more than the moon (which is wasted power).

In absolute terms, on receive, the fraction of the signal power received
from that power which hits the moon will be the same (same physical
aperture.. gain in dBi is larger, but that's just because an isotrope
has smaller aperture at higher frequencies).

So, your goal should be to illuminate JUST the moon (and a bit more to
cover pointing errors). Beamwidth is approximately = 70*wavelength/d.

So
GHz m deg dBi
2.4 0.125 2.9 35
3.4 0.088 2.0 38
5.7 0.053 1.2 43

Given that you want to light up the moon with the same power, at 2.4 GHz
it will take 8 dB more than 5.7 GHz.

Since the moon is about 1/2 degree wide, even 5.7 GHz is a bit low for a
10 foot reflector.

There's a little more than this to the whole problem, but, in general,
if what you want to do is measure the distance to the moon, a radar
built with an oven magnetron probably isn't the best way to go about
doing it.

2617. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 17:03:31 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ffil53$4pi$2@news.jpl.nasa.gov>
Source record: 35150

Dave Typinski wrote:
> On Sun, 21 Oct 2007 11:39:12 +0100, Highland Ham
> <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote:
>
>
>>Dave Typinski wrote:
>>
>>>Anyone have any ideas about what one might do with a television
>>>receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>>>for the price of dismantling it and hauling it out of the present
>>>owner's back yard.
>>>
>>>I'm thinking radio astronomy. Might be nice to make my own radio map
>>>of the galaxy. I'm guessing that this would work okay somewhere
>>>between 1 and 10 GHz... which means making a feed horn... which is
>>>easy enough to do.
>>>
>>>What else could I do with this antenna? Other than covering it in
>>>polyethylene sheet to make a really big bird bath...
>>
>>==================================
>>Possible usage:
>>1) EME amateur comms
>>2) WiFi low power experiments (provided there is line of sight freedom)
>>I remember having seen a web site with reports (incl photographs) that
>>some youngsters bridged a 125 km path using off the shelf equipment and
>>dishes having a size like yours.
>>
>>Hopefully you don't have just the dish but also a mounting pedestal and
>>perhaps even a motorised system .
>>
>>Frank GM0CSZ / KN6WH
>
>
> Yep, got the pedestal and the azimuth drive motor.
>
> 125 km at 2.4 GHz? How's that work? What were they bouncing the
> signal off of? That's definitely further than line of sight.

Not if the two endpoints are up on mountains....

2618. Re: "Balancing" versus "cancelling"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 17:05:39 UTC
From: You <You@shadow.orgs>
Message-ID: <You-54E4B2.09075222102007@netnews.worldnet.att.net>
Source record: 35148

In article <471b9f1a$0$17949$4fafbaef@reader1.news.tin.it>,
"Antonio Vernucci" <vernucci@tin.it> wrote:

> Your post reminds me of a guy who, when asked a glass of water, answered: but
> there no glasses made of water....

Obviously you have never seen "Stiff Water"..... You can make a Glass,
or any other container out of Stiff Water....you just need to keep them
below 0C.........

2619. Re: Testing earth stake efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 17:59:03 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <wLCdnd47eolPeYHanZ2dnUVZ8tKsnZ2d@bt.com>
Source record: 35149

"JERD" <jedunk@REMOVEbigpond.net.au> wrote in message
news:A13Ti.3114$CN4.600@news-server.bigpond.net.au...
>
> "Mike Kaliski" <michael.kaliski@tesco.net> wrote in message
> news:pIGdnen99pRk4oHaRVnyiQA@bt.com...
>>
>> "JERD" <jedunk@REMOVEbigpond.net.au> wrote in message
>> news:GqUSi.2846$CN4.2396@news-server.bigpond.net.au...
>>>I am wondering if anyone can enlighten me on how to test ones earth stake
>>>efficiency?
>
>
>> An earth connection that is satisfactory for electrical supply safety
>> purposes may not necessarily be adequate for RF use.
>>
>> Mike G0ULI
>
> Mike, can you please elaborate on this last sentence for me please?
>
> JERD
>
I have replied in detail off forum but to summarise, the consumer earth
connection is provided for electrical safety purposes to reduce the chance
of lethal shock from the supply and to ensure that circuit protection
devices operate to prevent the risk of fire under fault conditions. It is
not provided for radio applications.

Having the best earth in the world can all be negated by then running a long
earth cable up the wall of a building to an upper storey radio installation.
Keep earthing runs as short as possible and ideally have your radio
equipment installed on the ground floor or in a garden shed.

Mike G0ULI

2620. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 19:29:02 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <471cf9fa$0$20592$4c368faf@roadrunner.com>
Source record: 35152

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message
news:ffil41$4pi$1@news.jpl.nasa.gov...
> Dave Typinski wrote:
>> On Sun, 21 Oct 2007 01:01:19 -0400, "Jimmie D"
>> <GFENDER@carolina.rr.com> wrote:
>>
>>>"Dave Typinski" <nospam@nospam.net> wrote in message
>>>news:healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com...
>>>
>>>>Anyone have any ideas about what one might do with a television
>>>>receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>>>>for the price of dismantling it and hauling it out of the present
>>>>owner's back yard.
>>>>
>>>>I'm thinking radio astronomy. Might be nice to make my own radio map
>>>>of the galaxy. I'm guessing that this would work okay somewhere
>>>>between 1 and 10 GHz... which means making a feed horn... which is
>>>>easy enough to do.
>>>>
>>>>What else could I do with this antenna? Other than covering it in
>>>>polyethylene sheet to make a really big bird bath...
>>>>--
>>>>Dave Typinski
>>>>AJ4CO
>>>
>>>I know of a couple of guys that took two of them, one for rx and one for
>>>tx, tx was a microwave oven mgnetron. He and his frined talked to each
>>>other via troposcatter. I do know if a maggie operates within a ham band
>>>or not but it didnt matter too much for these guys because they didnt
>>>have a ticket anyway.
>>>
>>>Jimmie
>>
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>> I thought about magnetrons... but not for communication. My idea is
>> to set it up as a radar station to measure the distance to the Moon. A
>> microwave oven magnetron operates at 2450 MHz, which is right at the
>> upper edge of the 13cm ham band. Unfortunately, magnetrons produce a
>> really dirty, wide output. Worse, being right at the edge of the
>> band, half the RF energy would be out of band.
>
> Just how precise a measurement do you want to make? You could do quite
> well using a 100W 2m SSB rig and a decent yagi antenna and some signal
> processing software.

>
> See, e.g. http://home.earthlink.net/~n5bf/eme2.html
>
>
>
>
>>
>> I don't know if one can re-tune a magnetron by the addition of
>> external components; I'd like to get the thing down to 2.42 GHz to put
>> the emission in the center of the 13cm band. There are such things as
>> tunable magnetrons; but, they aren't found in microwave ovens, which
>> means they won't likely be had for free.
>>
>> That said, I'd sure like to look at the output from an oven magnetron
>> with a spectrum analyzer. Maybe the output isn't as dirty and wide as
>> I think it is.
>
> it is quite dirty, even more so in an oven because:
> 1) it's fed by a half wave voltage doubler, so it's pulsed at line
> frequency
> 2) the voltage waveform is hardly nice and regulated
> 3) the temperature of the tube changes during operation
>
>
> Why not build/buy some small no-tune transverters for 3.4 or 5.7 GHz and
> use those. At least then, you can do coherent processing over some
> reasonable time span, and what you lose in raw pulse power, you pick up in
> processing gain.
>
> The beamwidth of your 10ft dish at 2.4 GHz is going to be pretty wide, so
> you're illuminating a lot more than the moon (which is wasted power).
>
> In absolute terms, on receive, the fraction of the signal power received
> from that power which hits the moon will be the same (same physical
> aperture.. gain in dBi is larger, but that's just because an isotrope has
> smaller aperture at higher frequencies).
>
> So, your goal should be to illuminate JUST the moon (and a bit more to
> cover pointing errors). Beamwidth is approximately = 70*wavelength/d.
>
> So
> GHz m deg dBi
> 2.4 0.125 2.9 35
> 3.4 0.088 2.0 38
> 5.7 0.053 1.2 43
>
> Given that you want to light up the moon with the same power, at 2.4 GHz
> it will take 8 dB more than 5.7 GHz.
>
> Since the moon is about 1/2 degree wide, even 5.7 GHz is a bit low for a

> 10 foot reflector.
>
>
> There's a little more than this to the whole problem, but, in general, if
> what you want to do is measure the distance to the moon, a radar built
> with an oven magnetron probably isn't the best way to go about doing it.

2621. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 19:29:12 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <471cfa04$0$26377$4c368faf@roadrunner.com>
Source record: 35153

"Jim Lux" <james.p.lux@jpl.nasa.gov> wrote in message
news:ffil41$4pi$1@news.jpl.nasa.gov...
> Dave Typinski wrote:
>> On Sun, 21 Oct 2007 01:01:19 -0400, "Jimmie D"
>> <GFENDER@carolina.rr.com> wrote:
>>
>>>"Dave Typinski" <nospam@nospam.net> wrote in message
>>>news:healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com...
>>>
>>>>Anyone have any ideas about what one might do with a television
>>>>receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>>>>for the price of dismantling it and hauling it out of the present
>>>>owner's back yard.
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>>>>I'm thinking radio astronomy. Might be nice to make my own radio map
>>>>of the galaxy. I'm guessing that this would work okay somewhere
>>>>between 1 and 10 GHz... which means making a feed horn... which is
>>>>easy enough to do.
>>>>
>>>>What else could I do with this antenna? Other than covering it in
>>>>polyethylene sheet to make a really big bird bath...
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>>>>Dave Typinski
>>>>AJ4CO
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>>>tx, tx was a microwave oven mgnetron. He and his frined talked to each
>>>other via troposcatter. I do know if a maggie operates within a ham band
>>>or not but it didnt matter too much for these guys because they didnt
>>>have a ticket anyway.
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>>>Jimmie
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>> I thought about magnetrons... but not for communication. My idea is
>> to set it up as a radar station to measure the distance to the Moon. A
>> microwave oven magnetron operates at 2450 MHz, which is right at the
>> upper edge of the 13cm ham band. Unfortunately, magnetrons produce a
>> really dirty, wide output. Worse, being right at the edge of the
>> band, half the RF energy would be out of band.
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> Just how precise a measurement do you want to make? You could do quite
> well using a 100W 2m SSB rig and a decent yagi antenna and some signal
> processing software.

>
> See, e.g. http://home.earthlink.net/~n5bf/eme2.html
>
>
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>
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>> I don't know if one can re-tune a magnetron by the addition of
>> external components; I'd like to get the thing down to 2.42 GHz to put
>> the emission in the center of the 13cm band. There are such things as
>> tunable magnetrons; but, they aren't found in microwave ovens, which
>> means they won't likely be had for free.
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>> That said, I'd sure like to look at the output from an oven magnetron
>> with a spectrum analyzer. Maybe the output isn't as dirty and wide as
>> I think it is.
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> it is quite dirty, even more so in an oven because:
> 1) it's fed by a half wave voltage doubler, so it's pulsed at line
> frequency
> 2) the voltage waveform is hardly nice and regulated
> 3) the temperature of the tube changes during operation
>
>
> Why not build/buy some small no-tune transverters for 3.4 or 5.7 GHz and
> use those. At least then, you can do coherent processing over some
> reasonable time span, and what you lose in raw pulse power, you pick up in
> processing gain.
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> The beamwidth of your 10ft dish at 2.4 GHz is going to be pretty wide, so
> you're illuminating a lot more than the moon (which is wasted power).
>
> In absolute terms, on receive, the fraction of the signal power received
> from that power which hits the moon will be the same (same physical
> aperture.. gain in dBi is larger, but that's just because an isotrope has
> smaller aperture at higher frequencies).
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> So, your goal should be to illuminate JUST the moon (and a bit more to
> cover pointing errors). Beamwidth is approximately = 70*wavelength/d.
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> So
> GHz m deg dBi
> 2.4 0.125 2.9 35
> 3.4 0.088 2.0 38
> 5.7 0.053 1.2 43
>
> Given that you want to light up the moon with the same power, at 2.4 GHz
> it will take 8 dB more than 5.7 GHz.
>
> Since the moon is about 1/2 degree wide, even 5.7 GHz is a bit low for a

> 10 foot reflector.
>
>
> There's a little more than this to the whole problem, but, in general, if
> what you want to do is measure the distance to the moon, a radar built
> with an oven magnetron probably isn't the best way to go about doing it.

2622. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 19:32:29 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <471cfac3$0$19630$4c368faf@roadrunner.com>
Source record: 35154

>
> There's a little more than this to the whole problem, but, in general, if
> what you want to do is measure the distance to the moon, a radar built
> with an oven magnetron probably isn't the best way to go about doing it.

Some people just get there kicks by doing thing with bubble gum and bailing wire, on the other hand you sound like an epoxy and tie wrap kind of fellow.
SSTM

Jimmie

2623. Re: DVB-t (UFH) log periodic question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 20:09:00 UTC
From: luc o <luco53@hotmail.com>
Message-ID: <Xns99D1E15221571luco53hotmailcom@194.134.69.69>
Source record: 35155

Helmut Wabnig <hwabnig@ .- --- -. DOT .- t> wrote in
news:sv2ph3h3a3ddvnq99afv65osjfo86opgvp@4ax.com:

> When nobody else comments, I do.
>
> Yes, I actually bult several LPDAs from the LOGPERIO
> calculations and they work perfectly
>
> Caution:
> Each LPDA has certain Z variations over the
> whole frequency range.
> 1 : 1.7 is very well done.....! 1:2 is still good.
>
> Do you have the LOGPERIO version with the
> antenna graph display?
> http://members.aon.at/hwabnig/
> w.
>

Hi Helmut!

Many thanks for your comments.
NO, I had the 'default' version, in which I'd made some layout changes,
but I really like your version much more!

Thanks for sharing your experience - now I will certainly try one
(although building antennas also gives lots of fun!).

As soon as I will have one completed, tested and installed (for DVB-T
use, called 'Digitenne') I will leave another message sharing my
experiences.

Luc

2624. Re: Testing earth stake efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 22:51:44 UTC
From: richardharrison@webtv.net
Message-ID: <14749-471D2980-718@storefull-3256.bay.webtv.net>
Source record: 35157

JERD wrote:
"I am wondering if anyone can enlighten me on how to test ones earth stake efficiency?"

Copper-clad rods will greatly outlast galvanized rods.

Reg Edwards, G4FGQ had among his trove of free programs one called "Earthies", if I recall. Reg is now a silent key (SK) but his programs survive and are still available free.

Search on: K3HRN site with G4FGQ programs. The site will appear. I had always wondered what Reg looked like. His portrait is on this site.

Best regards, Richard Harrison, KB5WZI

2625. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 22:54:42 UTC
From: Dave Typinski <nospam@nospam.net>
Message-ID: <uf9qh35l2vj27bl3mgoktmf6hmn566nfo0@4ax.com>
Source record: 35156

On Mon, 22 Oct 2007 10:02:57 -0700, Jim Lux <james.p.lux@jpl.nasa.gov>
wrote:

>Dave Typinski wrote:
>> On Sun, 21 Oct 2007 01:01:19 -0400, "Jimmie D"
>> <GFENDER@carolina.rr.com> wrote:
>>
>>>"Dave Typinski" <nospam@nospam.net> wrote in message
>>>news:healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com...
>>>
>>>>Anyone have any ideas about what one might do with a television
>>>>receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>>>>for the price of dismantling it and hauling it out of the present
>>>>owner's back yard.
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>>>>I'm thinking radio astronomy. Might be nice to make my own radio map
>>>>of the galaxy. I'm guessing that this would work okay somewhere
>>>>between 1 and 10 GHz... which means making a feed horn... which is
>>>>easy enough to do.
>>>>
>>>>What else could I do with this antenna? Other than covering it in
>>>>polyethylene sheet to make a really big bird bath...
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>>>>Dave Typinski
>>>>AJ4CO
>>>
>>>I know of a couple of guys that took two of them, one for rx and one for tx,
>>>tx was a microwave oven mgnetron. He and his frined talked to each other via
>>>troposcatter. I do know if a maggie operates within a ham band or not but it
>>>didnt matter too much for these guys because they didnt have a ticket
>>>anyway.
>>>
>>>Jimmie
>>
>>
>> I thought about magnetrons... but not for communication. My idea is
>> to set it up as a radar station to measure the distance to the Moon. A
>> microwave oven magnetron operates at 2450 MHz, which is right at the
>> upper edge of the 13cm ham band. Unfortunately, magnetrons produce a
>> really dirty, wide output. Worse, being right at the edge of the
>> band, half the RF energy would be out of band.
>
>Just how precise a measurement do you want to make? You could do quite
>well using a 100W 2m SSB rig and a decent yagi antenna and some signal

>processing software.
>
>See, e.g. http://home.earthlink.net/~n5bf/eme2.html
>>
>> I don't know if one can re-tune a magnetron by the addition of
>> external components; I'd like to get the thing down to 2.42 GHz to put
>> the emission in the center of the 13cm band. There are such things as
>> tunable magnetrons; but, they aren't found in microwave ovens, which
>> means they won't likely be had for free.
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>> That said, I'd sure like to look at the output from an oven magnetron
>> with a spectrum analyzer. Maybe the output isn't as dirty and wide as
>> I think it is.
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>it is quite dirty, even more so in an oven because:
>1) it's fed by a half wave voltage doubler, so it's pulsed at line frequency
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>3) the temperature of the tube changes during operation
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>
>Why not build/buy some small no-tune transverters for 3.4 or 5.7 GHz and
>use those. At least then, you can do coherent processing over some
>reasonable time span, and what you lose in raw pulse power, you pick up
>in processing gain.

A nice idea, thank you.

>The beamwidth of your 10ft dish at 2.4 GHz is going to be pretty wide,
>so you're illuminating a lot more than the moon (which is wasted power).
>
>In absolute terms, on receive, the fraction of the signal power received
>from that power which hits the moon will be the same (same physical
>aperture.. gain in dBi is larger, but that's just because an isotrope
>has smaller aperture at higher frequencies).
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>cover pointing errors). Beamwidth is approximately = 70*wavelength/d.
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>GHz m deg dBi
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>5.7 0.053 1.2 43
>
>Given that you want to light up the moon with the same power, at 2.4 GHz
>it will take 8 dB more than 5.7 GHz.
>
>Since the moon is about 1/2 degree wide, even 5.7 GHz is a bit low for a
>10 foot reflector.

Thanks a bunch for pointing that out. I'd wondered about the relationship between beam width, reflector diameter, and frequency.

Now that I think about it, doesn't focal length or focal ratio play a part as well?

I don't suppose you could point me at a decent reference for this stuff, could you? I've found that Google (i.e., the web) is somewhat lacking when it comes to explanations - especially accurate ones - of where those nifty approximation equations come from.

>There's a little more than this to the whole problem, but, in general,
>if what you want to do is measure the distance to the moon, a radar
>built with an oven magnetron probably isn't the best way to go about
>doing it.

So noted. The goal here is not so much to do it the best way possible, but rather to see what kind of results I can obtain using the scrap (i.e., free) materials I have available.

If I were after accuracy, I'd point a laser at the corner reflectors left by the Apollo missions. 8^)
--
Dave Typinski
AJ4CO

2626. Re: Testing earth stake efficiency

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 23:51:42 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D2644457CA3nonenowhere@61.9.191.5>
Source record: 35158

"JERD" <jedunk@REMOVEbigpond.net.au> wrote in
news:GqUSi.2846$CN4.2396@news-server.bigpond.net.au:

> I am wondering if anyone can enlighten me on how to test ones earth
> stake efficiency?
>
> The only item I am aware of goes back a real long way and that is the
> wind it yourself megga tester!
>
> Any modern ways of doing it these days or does one just hope for the
> best!
>

I assume you are trying to measure the low frequency resistance of the electrode. The minimum reliable method is known as the three wire fall of potential method... Google for it.

Galvanised electrodes are less consistenn that copper clad electrodes, so you may find repeated measurements over time vary more than accounted for by soil characteristics alone.

Owen

2627. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-22 23:54:05 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ffjd6t$mq0$1@news.jpl.nasa.gov>
Source record: 35159

> Thanks a bunch for pointing that out. I'd wondered about the
> relationship between beam width, reflector diameter, and frequency.
>
> Now that I think about it, doesn't focal length or focal ratio play a
> part as well?
>
> I don't suppose you could point me at a decent reference for this
> stuff, could you? I've found that Google (i.e., the web) is somewhat
> lacking when it comes to explanations - especially accurate ones - of
> where those nifty approximation equations come from.

Depends on the level of detail and backup you want. There's a EW
Handbook at Point Mugu Naval Air Station, you might be able to find it
with google.

W1GHZs online book is at: http://www.w1ghz.org/antbook/preface.htm

>
>
>>There's a little more than this to the whole problem, but, in general,
>>if what you want to do is measure the distance to the moon, a radar
>>built with an oven magnetron probably isn't the best way to go about
>>doing it.
>
>
> So noted. The goal here is not so much to do it the best way
> possible, but rather to see what kind of results I can obtain using
> the scrap (i.e., free) materials I have available.

Sure, I understand..

It's just that MO Magnetrons are such ragged edge cost sensitive items
that they spend absolutely nothing on making them good transmitter
components. After all, all they have to do is heat stuff, cheaply.

Even if you have a design from, say, 20-30 years ago, I suspect that
modern tubes aren't going to be as suitable.

I did see a clever design where they took a whole array of MO magnetrons
and injection locked them to build a microwave weed killer. Microwave
Journal, October 2005.

http://www.mwjournal.com/journal/article.asp?HH_ID=AR_113

Enjoy...

>
> If I were after accuracy, I'd point a laser at the corner reflectors
> left by the Apollo missions. 8^)

Hmmm.. That's a nontrivial thing.. BUT, you could do (maybe the first)
optical EME contact on the 470 THz band.

2628. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 00:48:42 UTC
From: richardharrison@webtv.net
Message-ID: <21639-471D44EA-91@storefull-3252.bay.webtv.net>
Source record: 35160

John Doe wrote:
"I have a lot of time on my hands - "

Kraus calls fractal antennas "artistic antennas". Kraus says: "Fractals are structures that preserve their shape at different scales."

In Figure 21-50 of page 774 of the 3rd edition of "antennas" (If you don`t have it, you need it), Kraus writes:
"Note the impedance fluctuations of the fractal antennas compared with the plate and square loop."

Not a ringing endorsement but there may have been progress since the book was published in 2003.

Best regards, Richard Harrison, KB5WZI

2629. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 01:28:06 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <QdqdnR5fs_mF04DanZ2dnUVZ_tqtnZ2d@adelphia.com>
Source record: 35161

```
<Mark@k4yzRobesin.org> wrote in message
news:g8kjh3liom72i3fg0j6q7h84alq3f9rr5g@4ax.com...
> On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>K4YZ wrote:
>>> Nope.
>>>
>>> The IP Address and servers are complete proof that I do NOT share
>>> any annonymous character's "address".
>>>
>>> Sounds like Lennie, to me....
>>>
>>> Steve, K4YZ
>>>
>>
>>To anyone with even an elementary understanding of anonymous proxies,
>>anonymous remailers, zombie backdoors, etc., the ability to change ones
>>IP address and header details is simplistic, indeed, with little time
>>spent anyone can appear to be "coming" from anywhere in the world.
>>
>>You waste my time. Worse, you think us all idiots here. You remind me
>>of the "street smart" prosecutors and defense attorneys who stack jurys
>>with members of little or no technical knowledge and then call in
>>"expert witnesses" and propose arguments of technical details to boggle
>>their minds.
>>
>>You have only proven that you, yourself are either ignorant to such
>>technical details, or else you are indeed street smart, I favor the
>>latter in this case (however, if you in the dark about such things, 15
>>minutes on google will enlighten you.)
>>
>>JS
> since someone wants us to belive that he is steve
>
> "one useless man is disgrace 2 become a law firm 3 or more become a
> congress"
> adams
>
> woger you are a Congress all in your own head
>
> http://kb9rqz.bravejournal.com/
> altopia is never used by KB9RQZ
> nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but
```

> google
>
> posts from these sorucees are fakes
>
> and get ou the newly recovered KB9RQZ.blogspot.com as well
>
> G
>
> --
> Posted via a free Usenet account from http://www.teranews.com

HEY DUMMY - U POSTED THIS CRAP-TRASH IN THE WRONG GROUP

2630. 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 03:20:50 UTC
From: 998cc <hrd998cc@yahooo.com>
Message-ID: <mMdTi.15732$JD.10530@newssvr21.news.prodigy.net>
Source record: 35162

I am looking for ways to improve my receive for 2-meter SSB weak signal work. I am running an Icom 706 MkIIG and a M2 5WL yagi. I understand mast mounted preamps bring the signal up significantly.
Doe any one here use one for 2M SSB? What are your experiences?

Thanks
Russ

2631. Re: 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 03:42:41 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D28B6E137CDnonenowhere@61.9.191.5>
Source record: 35163

"998cc" <hrd998cc@yahooo.com> wrote in
news:mMdTi.15732$JD.10530@newssvr21.news.prodigy.net:

> I am looking for ways to improve my receive for 2-meter SSB weak
> signal work. I am running an Icom 706 MkIIG and a M2 5WL yagi. I
> understand mast mounted preamps bring the signal up significantly.
> Doe any one here use one for 2M SSB? What are your experiences?

Russ, you may find the article at http://www.vk1od.net/gt/index.htm of interest. It includes a model framework to allow you to calculate the improvement that you would obtain from a LNA.

One thing to bear in mind is that laboratory tests of LNAs do not usually revean the amount of noise that will be generated in the LNA as a result of intermodulation processes... so it is unlikely to perform quite as well as indicated. At the same time, the same issue exists for the transceiver.

The good thing is that your 5WL Yagi will have a good deal of selectivity whereas it is certainly lacking in the '706IIG and in many of the lower cost preamps (no money wasted on filtering).

At the end of the day, it depends very much on your own noise environment, noise generated by IMD in your radio, and the equipment configuration. Hams tend to regard ambient noise as not an issue on 144MHz, but it probably is if you live in a residential area... and high ambient noise will limit the benefit of a LNA.

Owen

2632. Re: 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 05:57:36 UTC
From: Alan WA4SCA <ALANBIDDLE70@YAHOO.COM>
Message-ID: <7p2rh39u9b3tb0iruav33bh6hqer01farb@4ax.com>
Source record: 35164

Russ,

I have used both Landwehr and ARR preamps for 2 meter SSB. One of the major issues is how much coax, and what quality, you have. Another is the quality of the preamp which you have in your rig. In my case, I have about 70' of very low loss coax, almost hard line in performance. The preamp in my rig is fairly good, and the result is that there is little difference in performance, though there is a slight nod to the mast mounted unit. Lossy coax would definitely tip the choice to the mast mount. And in fact, on 70 cms with equivalent components, the mast mount is the clear winner. Beware of units which don't give you noise figures, as that is normally much more important for weak signal work than gain.

--
Alan
WA4SCA

2633. Re: 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 06:33:14 UTC
From: "Helmut Wabnig"
Message-ID: <k85rh3h02fof1as7tqs8pa2l52fmaup2qn@4ax.com>
Source record: 35165

On Tue, 23 Oct 2007 03:20:50 GMT, "998cc" <hrd998cc@yahooo.com> wrote:

>I am looking for ways to improve my receive for 2-meter SSB weak signal
>work. I am running an Icom 706 MkIIG and a M2 5WL yagi. I understand mast
>mounted preamps bring the signal up significantly.
>Doe any one here use one for 2M SSB? What are your experiences?
>
>Thanks
>Russ
>
Am just today experimenting with satellie in-line amplifiers,
the variety for home sat reception, cheap, small.

Some range from 100 MHz to 2,4 GHz, some have limiting
filters on the input which you can easily remove or modify.

Works.

w.

2634. Re: 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 08:29:06 UTC
From: Jeff <jeff@local.host>
Message-ID: <471db0fd$0$1339$834e42db@reader.greatnowhere.com>
Source record: 35166

>I am looking for ways to improve my receive for 2-meter SSB weak signal
>work. I am running an Icom 706 MkIIG and a M2 5WL yagi. I understand mast
>mounted preamps bring the signal up significantly.
> Doe any one here use one for 2M SSB? What are your experiences?
>
> Thanks
> Russ

There are 3 factors that determine if a preamp will help: does the radio have poor sensitivity to start with, do you have significant feeder loss,and how high is your ambient noise floor.

Taking the first and last together; no matter how good a pre-amp you use it will be of no help if you have a high ambient noise floor to start with. This is governed by where you live, quite country locations are obviously much better than cities. As a quick check, see on ssb if your noise floor drops significantly when you disconnect your aerial.
If it does then it is worth doing a better check where you compare the noise between the aerial and a good dummy load. If the noise still drops significantly then you are limited by the external ambient noise and all a preamp will do is amplify this noise. If is does not change then you either have a quite location or a noisy receiver.

If you are not limited by external noise then a preamp may help if you have a lot of feeder loss, but the pre-amp must be at the antenna end, and not the radio end, to improve things (unless you have a very very deaf receiver).

In any case keep the gain of the preamp as low as possible that is still consistent with improving the noise floor in order to limit problems with receiver overload.

73
Jeff

2635. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 11:13:06 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <kd2dnQbv9vfeSoDanZ2dnUVZ_oOnnZ2d@bright.net>
Source record: 35167

Here are two sites that might be of interest to you...

http://www.wa1mba.org/

http://www.w1ghz.org/ and the link here to the online microwave antenna book provides some good reading.

Scott

Dave Typinski wrote:

>
> I don't suppose you could point me at a decent reference for this
> stuff, could you? I've found that Google (i.e., the web) is somewhat
> lacking when it comes to explanations - especially accurate ones - of
> where those nifty approximation equations come from.

2636. Re: 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 15:53:56 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <99udnS2ci7-NhIPanZ2dnUVZ_vShnZ2d@comcast.com>
Source record: 35168

"998cc" <hrd998cc@yahooo.com> wrote in message
news:mMdTi.15732$JD.10530@newssvr21.news.prodigy.net...
>I am looking for ways to improve my receive for 2-meter SSB weak signal
>work. I am running an Icom 706 MkIIG and a M2 5WL yagi. I understand mast
>mounted preamps bring the signal up significantly.
> Doe any one here use one for 2M SSB? What are your experiences?
>
> Thanks
> Russ
>
It may not be worth the bother for low power. The receive preamp won't help
them hear you any better. At a KW output, you would want to do it for sure.
Meanwhile, make sure you are using low loss coax. That will help both
receive and transmit.

Tam/WB2TT

2637. Re: 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 16:01:15 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <471E1ACB.2080500@jpl.nasa.gov>
Source record: 35170

Owen Duffy wrote:
> "998cc" <hrd998cc@yahooo.com> wrote in
> news:mMdTi.15732$JD.10530@newssvr21.news.prodigy.net:
>
>

> The good thing is that your 5WL Yagi will have a good deal of selectivity
> whereas it is certainly lacking in the '706IIG and in many of the lower
> cost preamps (no money wasted on filtering).

I suspect the preamp makers would portray this as providing more system engineering flexibility, letting you, the system builder, decide how much filter selectivity (and corresponding loss/degradation of NF) you want.

After all, if you were doing EME with a big array pointed up into the sky, selectivity might not be such a big deal, but absolute lowest system noise figure might be.

2638. Re: Stainless Hardware Lesson

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 16:57:23 UTC
From: "pdrahn@coinet.com" <co_farmer@yahoo.com>
Message-ID: <1193158643.945425.174970@t8g2000prg.googlegroups.com>
Source record: 35169
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

On Oct 21, 9:44 pm, Fred McKenzie <fm...@aol.com> wrote:
> In article <471C1D2A.1080...@nettally.com>,
>
> **THE-RFI-EMI-GUY** <rhyol...@nettally.com> wrote:
> > Heat the ball mount with a torch to cause it to expand and melt some
> > candle wax into the threads as a lubricant (watch for fire). I don't
> > think you need red hot, just get the mount to expand enough to break the
> > bond and apply force to turn the QD threads.
>
> Joe & All-
>
> Thanks for the information and suggestions. I understand stainless is a
> poor conductor of heat. I might try a combination of freezing the parts
> and then using a torch on the outer piece to increase the temperature
> differential.
>
> The female threads may have been tapped prior to crimping that piece to
> the top shell of the ball, and the crimping process could have distorted
> the threads near the crimp. If I had known about the likelihood of
> "galling", I might have tried re-tapping the threads prior to installing
> the QD.
>
> Fred
> K4DII

Hi, Fred.
Retapping won't help, unless you have an oversized tap. What will help is using an adjustable die on the male part and squeezing the die down quite a bit before using it. This will give you a less than 50% thread engagement, but will still be enough for your antenna. Antisieze compound is the real answer. Also, if you ever need to drill and tap stainless, use the next larger size drill bit for the tap you are going to use. Otherwise you will surely break the tap. I have scars to testify to learning that!

Good luck,
Paul KD7HB

2639. Re: "Balancing" versus "cancelling"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 17:12:08 UTC
From: Antonio Vernucci <vernucci@tin.it>
Message-ID: <471e2b68$0$17949$4fafbaef@reader1.news.tin.it>
Source record: 35171

> Obviously you have never seen "Stiff Water"..... You can make a Glass,
> or any other container out of Stiff Water....you just need to keep them
> below 0C.......

You are wrong, as I know "Stiff Water" better than you do! As a matter of fact you only know one method for stiffening water, that is freezing it. I also know a second method: to drop a pill of Viagra into it!

73

Tony I0JX

2640. Re: "Balancing" versus "cancelling"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 17:26:41 UTC
From: You <You@shadow.orgs>
Message-ID: <You-E570AB.09285523102007@netnews.worldnet.att.net>
Source record: 35172

In article <471e2b68$0$17949$4fafbaef@reader1.news.tin.it>,
"Antonio Vernucci" <vernucci@tin.it> wrote:

> > Obviously you have never seen "Stiff Water"..... You can make a Glass,
> > or any other container out of Stiff Water....you just need to keep them
> > below 0C.......
>
> You are wrong, as I know "Stiff Water" better than you do! As a matter of
> fact
> you only know one method for stiffening water, that is freezing it. I also
> know
> a second method: to drop a pill of Viagra into it!
>
> 73
>
> Tony I0JX
>

Not likely Bozo, us alaskans are the original source of Stiff Water.....

2641. Re: Stainless Hardware Lesson

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 17:50:50 UTC
From: Fred McKenzie <fmmck@aol.com>
Message-ID: <fmmck-E5A7EB.13505023102007@nntp.aioe.org>
Source record: 35098
Cross-posted to: rec.radio.amateur.antenna,sci.electronics.repair

In article <1193158643.945425.174970@t8g2000prg.googlegroups.com>,
"pdrahn@coinet.com" <co_farmer@yahoo.com> wrote:

> Retapping won't help, unless you have an oversized tap.

Paul-

I understand there is also a "thread chaser" tap, which might be slightly oversized. I was thinking about the distorted threads being cleaned up by re-tapping. Perhaps one of the local hardware stores will have a 3/8-24 tap, as well as some anti-seize compound.

I contacted New-tronics by E-Mail. They also suggested heating the female threaded part with a torch. They apparently have encountered the problem before, but their instruction sheets never mentioned it or the need for an anti-seize compound.

Also, New-tronics does not sell parts, only complete assemblies!

Fred
K4DII

2642. my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 21:19:02 UTC
From: James Barrett <xucaen@comcast.net>
Message-ID: <s86dncgjT6SP-IPanZ2dnUVZ_rmjnZ2d@comcast.com>
Source record: 35173

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Hi, I just got my new (used) HF rig, and I strung up a half wave dipole
for 10 meters using 28.4 mhz in my calculations. Several hours later I
am getting an SWR reading of 2:1 at 28.4mhz. Is that pretty good or
should I try to do better?

I appreciate any opinions.

Jim

-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.4.6 (GNU/Linux)

iD8DBQFHHmVGQuDJiZ/QrH0RAnRNAJ9NcIJ58EeREFNwztYV7nkCSbb+hACcDveD
LHfGOxSNluOb7JXvTpx3OLY=
=EEQ7
-----END PGP SIGNATURE-----
```

2643. Re: 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 21:33:48 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1193175228.822137.318690@y27g2000pre.googlegroups.com>
Source record: 35174

On Oct 23, 2:33 am, Helmut Wabnig <hwabnig@ .- --- -. DOT .- t> wrote:
> On Tue, 23 Oct 2007 03:20:50 GMT, "998cc" <hrd99...@yahooo.com> wrote:
> >I am looking for ways to improve my receive for 2-meter SSB weak signal
> >work. I am running an Icom 706 MkIIG and a M2 5WL yagi. I understand mast
> >mounted preamps bring the signal up significantly.
> >Doe any one here use one for 2M SSB? What are your experiences?
>
> >Thanks
> >Russ
>
> Am just today experimenting with satellie in-line amplifiers,
> the variety for home sat reception, cheap, small.
>
> Some range from 100 MHz to 2,4 GHz, some have limiting
> filters on the input which you can easily remove or modify.
>
> Works.
>
> w.

I used one of these "bullet" preamps once upon a time and the the
improvement in reception was amazing, too amazing.This was a give away
clue that my coax was bad. When I cut the bottom end off about a cup
of water came out of it

Jimmie

2644. Re: 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 21:40:55 UTC
From: Jim-NN7K
Message-ID: <HTtTi.47556$RX.9916@newssvr11.news.prodigy.net>
Source record: 35175

998cc wrote:
> I am looking for ways to improve my receive for 2-meter SSB weak signal
> work. I am running an Icom 706 MkIIG and a M2 5WL yagi. I understand mast
> mounted preamps bring the signal up significantly.
> Doe any one here use one for 2M SSB? What are your experiences?
>
> Thanks
> Russ
>
>
Russ- You may improve your senseitivity to a degree, with a preamp,
but it may (or may not) be worth the effort. As the mast mounted
preamp will establish your Rx noise figure, but, the ONLY advantage
from the GAIN of the preamp, would be to overcome the (Coax Loss,+
the Xcvr front end Noise Figure)-
This assumes that the preamp has a Noise Figure LOWER than the rig
, as Lower loss (hardline)coax might be more beneficial!
- the rest of any gain will only
make your receiver subject to front end overloading , from nearby
STRONG signals! Futher, you must have SOMETHING to delay the
transmitter from keying (a " sequencer"), or you may destroy your
preamp, by transmitting into it! Question? What is the Fastest
fuse you can get? Answer: a Transistor! Another way to increase
sensetivity, is to narrow your receiver band width . Halve your
Bandwidth, gain 6 dB increase in senseativity (X-4). And, as a
reliatively good test as to HOW MUCH the preamp will improve your
reception, try this test: 1) attach a 50 ohm non inductive
resistor to your antenna connector, and note your NOISE LEVEL/
S-METER. 2) Now replace your dummy load with your antenna.
Did the noise /or S-METER INCREASE? If so, you are most likely
receiveing at your maximum senseativity. (IF the noise level stays the
same, you MAY make an improvement to your system, tho, HOW much,
is hard to say! Hope this helps-- Jim NN7K

2645. Re: Plotting antenna pattern from Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 21:45:01 UTC
From: JIMMIE <JIMMIEDEE123@YAHOO.COM>
Message-ID: <1193175901.883256.4940@v23g2000prn.googlegroups.com>
Source record: 35176

On Oct 16, 6:10 pm, Owen Duffy <n...@no.where> wrote:
> For those interested in confirming beamwidth of a large aperture dish at
> microwave frequencies, the following article describes a method using Sun
> noise as a measurement
source:http://www.vk1od.net/nfm/applications/AntennaPatternFromSun.htm.
>
> Owen

The Altitude and Azimuth of the Sun or Moon During One Day application
is located at the following URL:

http://aa.usno.navy.mil/data/docs/AltAz.php

The site can also be reached as follows: Access the U.S. Naval
Observatory Home web site (at http://www.usno.navy.mil/); at the menu
of the left of this home page select the Astro Applications entry.
>From the Astro Applications web page, select the Data Services entry.
>From the Data Services web page, select Altitude and Azimuth of the
Sun or Moon During One Day.

I hope this may prove useful.

Jimmie

2646. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 21:49:02 UTC
From: Dave <noone@nowhere.com>
Message-ID: <i%tTi.615$aB2.306@trndny07>
Source record: 35177

if the radio is happily putting out its rated power then don't touch it,
keep operating! remember, too low an swr can kill you!

"James Barrett" <xucaen@comcast.net> wrote in message
news:s86dncgjT6SP-IPanZ2dnUVZ_rmjnZ2d@comcast.com...
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> Hi, I just got my new (used) HF rig, and I strung up a half wave dipole
> for 10 meters using 28.4 mhz in my calculations. Several hours later I
> am getting an SWR reading of 2:1 at 28.4mhz. Is that pretty good or
> should I try to do better?
>
> I appreciate any opinions.
>
> Jim
>
> -----BEGIN PGP SIGNATURE-----
> Version: GnuPG v1.4.6 (GNU/Linux)
>
> iD8DBQFHHmVGQuDJiZ/QrH0RAnRNAJ9NcIJ58EeREFNwztYV7nkCSbb+hACcDveD
> LHfGOxSNluOb7JXvTpx3OLY=
> =EEQ7
> -----END PGP SIGNATURE-----

2647. Re: Plotting antenna pattern from Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 21:58:15 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D3510837581nonenowhere@61.9.191.5>
Source record: 35178

JIMMIE <JIMMIEDEE123@YAHOO.COM> wrote in
news:1193175901.883256.4940@v23g2000prn.googlegroups.com:

> On Oct 16, 6:10 pm, Owen Duffy <n...@no.where> wrote:
>> For those interested in confirming beamwidth of a large aperture dish
>> at microwave frequencies, the following article describes a method
>> using Sun noise as a measurement
>> source:http://www.vk1od.net/nfm/applications/AntennaPatternFromSun.htm
>> .
>>
>> Owen
>
> The Altitude and Azimuth of the Sun or Moon During One Day application
> is located at the following URL:
>
> http://aa.usno.navy.mil/data/docs/AltAz.php
>
> The site can also be reached as follows: Access the U.S. Naval
> Observatory Home web site (at http://www.usno.navy.mil/); at the menu
> of the left of this home page select the Astro Applications entry.
>>From the Astro Applications web page, select the Data Services entry.
>>From the Data Services web page, select Altitude and Azimuth of the
> Sun or Moon During One Day.
>
>
> I hope this may prove useful.

My article contains links to two spreadsheets, a basic one and an
enhanced one. The enhanced one contains macro functions that calculate
the Sun's position from the time data recorded by NFM (and your location
data). Of course, you need to make sure your computer clock is
syncronised before taking the measurements. The link to the enhanced
spreadsheet is in the Links section of
http://www.vk1od.net/nfm/applications/AntennaPatternFromSun.htm .

The spreadsheet uses a set of macro functions derived from the NOAA
calculator ant published by the Department of Ecology, Olympia WA.

Owen

2648. Re: 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 22:06:03 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D3525AADE31nonenowhere@61.9.191.5>
Source record: 35179

Jim-NN7K <nn7kexk7zfg@noway.net.> wrote in
news:HTtTi.47556$RX.9916@newssvr11.news.prodigy.net:

...
> And, as a
> reliatively good test as to HOW MUCH the preamp will improve your
> reception, try this test: 1) attach a 50 ohm non inductive
> resistor to your antenna connector, and note your NOISE LEVEL/
> S-METER. 2) Now replace your dummy load with your antenna.
> Did the noise /or S-METER INCREASE? If so, you are most likely
> receiveing at your maximum senseativity. (IF the noise level stays the
> same, you MAY make an improvement to your system, tho, HOW much,
> is hard to say! Hope this helps-- Jim NN7K

It is a relatively simple matter to measure the ambient noise level. The ambient noise level is one of the factors that is vital to understanding the benefit of a given preamp.

A simple test along the line of what Jim describes above, but leading to a quantitative figure for ambient noise is described at http://www.vk1od.net/sc/anc.htm , including a calculator to perform the calculations.

Not many hams can tell you what their ambient noise level is on 144MHz, but lots will wax on about the relative importance of LNA gain, LNA noise figure, and cable loss. If you don't know the ambient noise level, you cannot answer any of the other questions.

Note that ambient noise may change by hour of day and with antenna pointing.

Owen

2649. Re: 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-23 22:14:35 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D353CD9B5FFnonenowhere@61.9.191.5>
Source record: 35180

Jim Lux <james.p.lux@jpl.nasa.gov> wrote in
news:471E1ACB.2080500@jpl.nasa.gov:

> Owen Duffy wrote:
>> "998cc" <hrd998cc@yahooo.com> wrote in
>> news:mMdTi.15732$JD.10530@newssvr21.news.prodigy.net:
>>
>>
>
>> The good thing is that your 5WL Yagi will have a good deal of
>> selectivity whereas it is certainly lacking in the '706IIG and in
>> many of the lower cost preamps (no money wasted on filtering).
>
> I suspect the preamp makers would portray this as providing more
> system engineering flexibility, letting you, the system builder,
> decide how much filter selectivity (and corresponding loss/degradation
> of NF) you want.
>
> After all, if you were doing EME with a big array pointed up into the
> sky, selectivity might not be such a big deal, but absolute lowest
> system noise figure might be.

Hi Jim,

I suspect that was a bit tounge in cheek! I guess the manufacturers have done us a bigger favour with hand helds in making them lighter by minimising filtering.

If you want to fix an IC706IIG's front end selectivity here in Oz, one of those Canadian filters for about $250 + $300 shipping is just the go. Wait a minute, $550 to fix a $1000 radio's performance, and on just one band... I don't think so.

I wrote an article on the performance of a modestly priced kit 144MHz amplifier in the real world (as opposed to in a shielded room). I have devised a test configuration that asseses what I term the 'realisable sensitivity' which may be quite different to the specs derived in a shielded room. The article is at http://www.vk1od.net/gt/144LNA/index.htm
.

The article also looks at the G/T improvements expected from other configuration changes like a higher gain antenna and low loss coax, and whether the preamp is located at the masthead or transceiver. Of course, it all depends on one's own configuration, but the tools are there to model a specific configuration.

Owen

2650. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 00:00:31 UTC
From: ahso#1 <columbus@evuygt.com>
Message-ID: <zWvTi.1363$f63.69@trndny03>
Source record: 35181

"James Barrett" <xucaen@comcast.net> wrote in message
news:s86dncgjT6SP-IPanZ2dnUVZ_rmjnZ2d@comcast.com...
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> Hi, I just got my new (used) HF rig, and I strung up a half wave dipole
> for 10 meters using 28.4 mhz in my calculations. Several hours later I
> am getting an SWR reading of 2:1 at 28.4mhz. Is that pretty good or
> should I try to do better?
>
> I appreciate any opinions.
>
> Jim

What are you feeding your dipole with? Coax or ladder line ?I found that if
you use 450 ohm ladder line for your feed the length of the feed line can
cause you problems . What kind of rig are you using ? BTW welcome to the
group !

73 Will _._ ._ ..._ _ ..._ .. _..

>
> -----BEGIN PGP SIGNATURE-----
> Version: GnuPG v1.4.6 (GNU/Linux)
>
> iD8DBQFHHmVGQuDJiZ/QrH0RAnRNAJ9NcIJ58EeREFNwztYV7nkCSbb+hACcDveD
> LHfGOxSNluOb7JXvTpx3OLY=
> =EEQ7
> -----END PGP SIGNATURE-----

2651. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 00:23:28 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13ht4416mtehe0@corp.supernews.com>
Source record: 35182

"James Barrett" <xucaen@comcast.net> wrote in message
news:s86dncgjT6SP-IPanZ2dnUVZ_rmjnZ2d@comcast.com...
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> Hi, I just got my new (used) HF rig, and I strung up a half wave dipole
> for 10 meters using 28.4 mhz in my calculations. Several hours later I
> am getting an SWR reading of 2:1 at 28.4mhz. Is that pretty good or
> should I try to do better?
>
> I appreciate any opinions.
>
> Jim
>

Go up and down in frequency a few hundred KC and see what the swr is in
several places. Depending on the feedline and length it should probably be
lower at some frequency near 28.4.

2652. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 00:26:12 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <EiwTi.62466$YL5.50152@newssvr29.news.prodigy.net>
Source record: 35183

James Barrett wrote:
> Hi, I just got my new (used) HF rig, and I strung up a half wave dipole
> for 10 meters using 28.4 mhz in my calculations. Several hours later I
> am getting an SWR reading of 2:1 at 28.4mhz. Is that pretty good or
> should I try to do better?

That's marginally OK. What is the SWR at 28 MHz.?
What is the SWR at 29 MHz?
--
73, Cecil http://www.w5dxp.com

2653. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 00:27:56 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <gkwTi.62467$YL5.26095@newssvr29.news.prodigy.net>
Source record: 35184

ahso#1 wrote:
> What are you feeding your dipole with? Coax or ladder line ?I found that if
> you use 450 ohm ladder line for your feed the length of the feed line can
> cause you problems.

Not if your ladder-line is a multiply of 1/2
wavelengths at the frequency of operation.
--
73, Cecil http://www.w5dxp.com

2654. Re: Plotting antenna pattern from Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 00:31:04 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <cnwTi.7489$0l4.1447@trnddc08>
Source record: 35185

"Owen Duffy" <none@no.where> wrote in message
news:Xns99D3510837581nonenowhere@61.9.191.5...
> JIMMIE <JIMMIEDEE123@YAHOO.COM> wrote in
> news:1193175901.883256.4940@v23g2000prn.googlegroups.com:
>
>> On Oct 16, 6:10 pm, Owen Duffy <n...@no.where> wrote:
>>> For those interested in confirming beamwidth of a large aperture dish
>>> at microwave frequencies, the following article describes a method
>>> using Sun noise as a measurement
>>> source:http://www.vk1od.net/nfm/applications/AntennaPatternFromSun.htm
>>> .
>>>
>>> Owen
>>
>> The Altitude and Azimuth of the Sun or Moon During One Day application
>> is located at the following URL:
>>
>> http://aa.usno.navy.mil/data/docs/AltAz.php
>>
>> The site can also be reached as follows: Access the U.S. Naval
>> Observatory Home web site (at http://www.usno.navy.mil/); at the menu
>> of the left of this home page select the Astro Applications entry.
>>>From the Astro Applications web page, select the Data Services entry.
>>>From the Data Services web page, select Altitude and Azimuth of the
>> Sun or Moon During One Day.
>>
>>
>> I hope this may prove useful.
>
> My article contains links to two spreadsheets, a basic one and an
> enhanced one. The enhanced one contains macro functions that calculate
> the Sun's position from the time data recorded by NFM (and your location
> data). Of course, you need to make sure your computer clock is
> syncronised before taking the measurements. The link to the enhanced
> spreadsheet is in the Links section of
> http://www.vk1od.net/nfm/applications/AntennaPatternFromSun.htm .
>
> The spreadsheet uses a set of macro functions derived from the NOAA
> calculator ant published by the Department of Ecology, Olympia WA.
>
> Owen

Hi Owen

I use a free program "APTDecoder" for monitoring satellite location.
That program includes a "Flat Earth Monitor" in which the Sun and Moon are shown. A "mouse pointer" on either the Sun or Moon will give the location and Az-El from your location, in real time. I have never used the data to point my dish, but, if the data is erroroneous, Id like to know where is wrong so it can be made better.

Jerry

2655. Re: 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 01:01:55 UTC
From: 998cc <hrd998cc@yahooo.com>
Message-ID: <kQwTi.190$%Y6.128@nlpi061.nbdc.sbc.com>
Source record: 35186

Thank you Owen, Jim, Alan, Tam, Helmut, Jimmie and Jeff for all of the great responses. I guess I should have provided more info in the first post.

My station is in the foothills of Northern California at about 1200' elev which is somewhat rural and is relatively quiet most of the time. Power output is up to 500+ watts on VHF and the feedline to the antenna is about 90' of 1/2" Andrew Heliax hardline. The antenna is 43' up. Using my previuos yagi, an M2 2M12, I worked stations as far as Oregon and San Diego.

Good points on noise figures versus selctivity while considering noise floor of the rig. I did try chercking the receiver noise with a Microlab dummy load installed at the radio then with the antenna conneted. Yes, there is more noise with the antenna connected. What is interesting is that with the dummy load connected, the noise was just higher than wit the ope SO-239 at the radio.

The responses have also steered my attention toward the 706G itself. While it has been a great radio for several years, and offers fairly good performance on many bands, designing this and similar multi-band radios must include compromises. Perhaps I should be looking toward getting a rig more tailored
to the 2m band and SSB mode? The Icom IC-910H comes to mind.

At this point, I will look more closely at the antenna/feedline system I have and look into a better performing radio before investing in a mast-mounted preamp that will introduce more connectors in the feedline and which will likely require more maintenance as well.

Thanks again.
Russ W6OHM.

2656. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 01:35:06 UTC
From: Bob Miller <NOSPAM@neosoft.com>
Message-ID: <6v7th35k0h0v8tfot3holftjndp6mvnh3m@4ax.com>
Source record: 35187

On Tue, 23 Oct 2007 17:19:02 -0400, James Barrett <xucaen@comcast.net>
wrote:

>-----BEGIN PGP SIGNED MESSAGE-----
>Hash: SHA1
>
>Hi, I just got my new (used) HF rig, and I strung up a half wave dipole
>for 10 meters using 28.4 mhz in my calculations. Several hours later I
>am getting an SWR reading of 2:1 at 28.4mhz. Is that pretty good or
>should I try to do better?
>
>I appreciate any opinions.
>
>Jim

Try transmitting up and down the band to see where your lowest swr is.
Then you can shorten or lengthen the antenna a bit to get a low swr in
the 28.4 mhz range. If you can't quite get it to 1:1, coiling the coax
at the feedpoint, 4 or 5 turns about 6 inches in diameter can get you
pretty close to 1:1.

2:1 isn't bad, but you're probably not getting full power output if
your rig is solid state.

bob
k5qwg

>
>-----BEGIN PGP SIGNATURE-----
>Version: GnuPG v1.4.6 (GNU/Linux)
>
>iD8DBQFHHmVGQuDJiZ/QrH0RAnRNAJ9NcIJ58EeREFNwztYV7nkCSbb+hACcDveD
>LHfGOxSNluOb7JXvTpx3OLY=
>=EEQ7
>-----END PGP SIGNATURE-----

2657. Re: 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 01:37:57 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D37647F15A1nonenowhere@61.9.191.5>
Source record: 35188

"998cc" <hrd998cc@yahooo.com> wrote in
news:kQwTi.190$%Y6.128@nlpi061.nbdc.sbc.com:

...
> floor of the rig. I did try chercking the receiver noise with a
> Microlab dummy load installed at the radio then with the antenna
> conneted. Yes, there is more noise with the antenna connected. What

The higher the ratio of noise from the antenna to noise from the dummy load, the less likely you are to get much benefit from a better receiver.

You need this ratio which tells you the ambient noise (albeit with IMD noise rolled in) to predict how much a LNA or better receiver will improved things.

Of course, by 'improve' I mean better S/N ratio, not simply higher S meter deflection.

Alternatively, you suck it and see.

> is interesting is that with the dummy load connected, the noise was
> just higher than wit the ope SO-239 at the radio.

I assume that was to say "with the open SO-239".

I don't really know what you can conclude, because you don't know enough about the radio when the input jack is o/c.

Owen

2658. Re: Plotting antenna pattern from Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 01:39:32 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D3768CCD4EAnonenowhere@61.9.191.5>
Source record: 35189

"Jerry Martes" <j.jmartes@verizon.net> wrote in
news:cnwTi.7489$0l4.1447@trnddc08:

...
> location and Az-El from your location, in real time. I have never
> used the data to point my dish, but, if the data is erroroneous, Id
> like to know where is wrong so it can be made better.

Jerry, I have no knowledge of the program you speak of, and cannot comment
on its accuracy.

Owen

2659. Re: Plotting antenna pattern from Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 01:59:12 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <QFxTi.27907$DX.11271@trnddc06>
Source record: 35190

"Owen Duffy" <none@no.where> wrote in message
news:Xns99D3768CCD4EAnonenowhere@61.9.191.5...
> "Jerry Martes" <j.jmartes@verizon.net> wrote in
> news:cnwTi.7489$0l4.1447@trnddc08:
>
> ...
>> location and Az-El from your location, in real time. I have never
>> used the data to point my dish, but, if the data is erroroneous, Id
>> like to know where is wrong so it can be made better.
>
> Jerry, I have no knowledge of the program you speak of, and cannot comment
> on its accuracy.
>
> Owen

Hi Owen

The APTDecoder program is written by Patrik Tast who lives in Finland.
The main reason for anyone using the program is to decode NOAA weather satellite signals so images of the satellite's view of the Earth, from orbit can be displayed on computers by amateurs (in real time).
I mentioned the "Flat Earth Monitor" in Patrik's program because it seems to always be a source of Az-El and Lon-Lat for Sun and Moon position. You tell the program where you are and the program tells you where to point. I mentioned the "accuracy" because he is interested in knowing about any improvements he can make to his program. Patrik does not charge for his program. He is an amateur, interested in providing good data, and I consider you to be a good critic.

Jerry

2660. Re: 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 02:01:18 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <sHxTi.4756$W9.1250@bignews6.bellsouth.net>
Source record: 35091

"998cc" <hrd998cc@yahooo.com> wrote in message
news:mMdTi.15732$JD.10530@newssvr21.news.prodigy.net...
>I am looking for ways to improve my receive for 2-meter SSB weak signal
>work. I am running an Icom 706 MkIIG and a M2 5WL yagi. I understand mast
>mounted preamps bring the signal up significantly.
> Doe any one here use one for 2M SSB? What are your experiences?
>
> Thanks
> Russ
>
Stack another yagi so you can reply to what you hear.

2661. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 02:08:23 UTC
From: Hal Rosser <hmrosser@bellsouth.net>
Message-ID: <0OxTi.4759$W9.1025@bignews6.bellsouth.net>
Source record: 35092

"James Barrett" <xucaen@comcast.net> wrote in message
news:s86dncgjT6SP-IPanZ2dnUVZ_rmjnZ2d@comcast.com...
> Hi, I just got my new (used) HF rig, and I strung up a half wave dipole
> for 10 meters using 28.4 mhz in my calculations. Several hours later I
> am getting an SWR reading of 2:1 at 28.4mhz. Is that pretty good or
> should I try to do better?
>
> I appreciate any opinions.
>
> Jim

If you can hear - and be heard and the band is open - then you're ok.
If you can't hear or get heard - raise the antenna and try again.
Good swr does not automatically mean a good antenna.

2662. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 02:20:00 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <471eabd1$0$32517$4c368faf@roadrunner.com>
Source record: 35093

"Mike Kaliski" <michael.kaliski@tesco.net> wrote in message
news:gL2dncF0tLrtcITanZ2dnUVZ8sijnZ2d@bt.com...
> "John Doe" <hgorden@adelphia.net> wrote in message
> news:yZ6dndiaQLshq4TanZ2dnUVZ_qqgnZ2d@adelphia.com...
>>I am looking for the construction article "FRACTAL Antenna for 10m" that
>>appeared sometime ago in I think either QST, Ham Radio, or 73 magazines.
>>
>> I have a lot of spare time on my hands - so I thought I would like to
>> construct one and use it portable as I live in a Antenna Restricted
>> Community.
>>
>> 73's
>>
> As others have mentioned, several articles appeared in various magazines
> about the design of fractal antennas. The basic idea is to fold a standard
> length of wire using a fractal pattern so that it fits into a smaller
> space. One solution I saw was to wind a wire back and forth across and
> along a plank of wood using pins or slots cut in the wood to support the
> turns. Taking a four inch wide piece of wood around eight feet long and
> winding equispaced turns you could easily fit 24 feet of wire along the
> plank.
> __ __ __
> |__| |__| |__| | Using a pattern like this.
>
> Other more complex or even three dimensional designs can fit more wire
> into a given space.
>
> Older interpretations of antenna theory predicted that the interaction
> between the closely spaced wires would effectively short out the turns and
> you would end up with the equivalent of an 8 foot length radiating element
> rather than the 24 feet of wire wound along the plank of wood. While there
> is interaction, the apparent reduction in radiator element length is not
> as bad as was predicted. So fractally wound elements can be worth the
> effort where space is at a premium.
>
> It is significant that the majority of development work into these
> antennas has taken place for frequencies above 1Ghz. Main applications
> include mobile phones, RF ID tags, security and remote sensing tags. At
> Ghz frequencies, exotic patterns can be easily etched onto circuit boards
> at minimal cost. Koch snowflake like fractal patterns combined with
> circular whorls seem very popular with commercial manufacturers. A google
> search will reveal quite a few pictures of what is being produced.
>
> It is not necessary to try and duplicate the complexity of professional

> designs. The main criteria seems to be to keep the wires as evenly spaced
> as possible, hence the width of the winding should be approximately equal
> to the linear step along the plank of wood or whatever support frame you
> are using, i.e. 4 inches up, 4 inches along, 4 inches down, four inches
> along, 4 inches up, etc. etc.
>
> As you will doubtless appreciate, this is similar to a three dimensional
> coil being wound on a former. Because the fractal winding is flat, there
> are fewer inductance effects.
>
> Obviously fractal antennae are designed for a specific frequency or band,
> but the type of winding pattern and spacing have an effect on the
> bandwidth. Obviously you will need two mirror image windings to create a
> dipole antenna, ideally as closely matched in dimensions as possible.
> Efficiencies can approach 50% of a full sized radiating element.

The without even realizing it before, I have a "fractal" antenna in my attic (it looks like a G5RV turned into a square wave) :-))

I'm sure my "fractal" antenna has no lobes and has a fairly high radiation angle but it works fairly well. Maybe I could patent it :-))

2663. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 02:24:58 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <471eacfe$0$20616$4c368faf@roadrunner.com>
Source record: 35094

"art" <aunwin@insightbb.com> wrote in message
news:1192846167.348753.14790@i38g2000prf.googlegroups.com...
> On 19 Oct, 18:31, "Stefan Wolfe" <ste...@eml.com> wrote:
>> "John Doe" <hgor...@adelphia.net> wrote in message
>>
>> news:yZ6dndiaQLshq4TanZ2dnUVZ_qqgnZ2d@adelphia.com...
>>
>> >I am looking for the construction article "FRACTAL Antenna for 10m" that
>> >appeared sometime ago in I think either QST, Ham Radio, or 73 magazines.
>>
>> > I have a lot of spare time on my hands - so I thought I would like to
>> > construct one and use it portable as I live in a Antenna Restricted
>> > Community.
>>
>> > 73's
>>
>> John, there is no such thing as a fractal antenna. Antennas can only
>> function in real space-time. It is a only figment of certain
>> matematicians'
>> imaginations. Sorry. 73
>
> Sorry.
> There is a patent issued and many, many, more in the pipeline.
> Look up Fractus antennas or subscribe to the quarterly industrial
> magazine
> called Antennas.The Fractus company was featured at the Antenna
> exhibition in
> Denver last month. Entrance fee was about $1000
> At the companies inception it won seed money from the military
> to continue their work so the antenna is viable.

The only conditions for issuance of a patent would be that it is different
than prior art and that it transmits radio waves with a radiation efficiency
greater than 0.0%. That fact that there is a patent does not mean that a
product exists for which a successful marketing business model can be
created but then again, successful business models have been created on
'inventions' even less credible than fractal antennas. The "pet rock" comes
to mind.

2664. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 03:06:05 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <MPidnYr-CekFK4PanZ2dnUVZ_tCrnZ2d@comcast.com>
Source record: 35095

"James Barrett" <xucaen@comcast.net> wrote in message
news:s86dncgjT6SP-IPanZ2dnUVZ_rmjnZ2d@comcast.com...
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> Hi, I just got my new (used) HF rig, and I strung up a half wave dipole
> for 10 meters using 28.4 mhz in my calculations. Several hours later I
> am getting an SWR reading of 2:1 at 28.4mhz. Is that pretty good or
> should I try to do better?
>
> I appreciate any opinions.
>
> Jim
>
It's probably too long, but check it at 28 & 29 Mhz. If the SWR at 28 is
better, it is too long; if the SWR at 29 is better, it is too short.
Assuming you are using 50 Ohm coax, no reason you can't get it below 1.5:1.

Tam

2665. Re: Plotting antenna pattern from Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 04:27:13 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D392FA5A552nonenowhere@61.9.191.5>
Source record: 35096

"Jerry Martes" <j.jmartes@verizon.net> wrote in
news:QFxTi.27907$DX.11271@trnddc06:

> does not charge for his program. He is an amateur, interested in
> providing good data, and I consider you to be a good critic.

Hi Jerry,

That is flattering, but undeserved I am sure.

There are a lot of calculators on the 'net for giving the Sun's position at a place and time, and they use varying algorithms for more or less accuracy.

The routines I used in the spreadsheet were unashamedly the work of some one else, the chap who converted them to VBA and the original NOAA javascript routines behind their page at http://www.srrb.noaa.gov/highlights/sunrise/azel.html . I have accepted they were good enough for my application, and they seemed quite close to another navigator application that I have.

Owen

2666. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 06:14:16 UTC
From: Tehrasha Darkon <darkon@netins.net>
Message-ID: <pan.2007.10.24.06.14.39@netins.net>
Source record: 35097

On Tue, 23 Oct 2007 17:19:02 -0400, James Barrett wrote:

> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> Hi, I just got my new (used) HF rig, and I strung up a half wave dipole
> for 10 meters using 28.4 mhz in my calculations. Several hours later I
> am getting an SWR reading of 2:1 at 28.4mhz. Is that pretty good or
> should I try to do better?
>
> I appreciate any opinions.
>
> Jim

Nobody else has asked this magic question yet....

How high off of the ground is your dipole?

--Teh

2667. Re: 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 13:14:16 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <SeudnXCBjIS_2ILanZ2dnUVZ_sytnZ2d@comcast.com>
Source record: 35099

"Hal Rosser" <hmrosser@bellsouth.net> wrote in message
news:sHxTi.4756$W9.1250@bignews6.bellsouth.net...
>
> "998cc" <hrd998cc@yahooo.com> wrote in message
> news:mMdTi.15732$JD.10530@newssvr21.news.prodigy.net...
>>I am looking for ways to improve my receive for 2-meter SSB weak signal
>>work. I am running an Icom 706 MkIIG and a M2 5WL yagi. I understand
>>mast mounted preamps bring the signal up significantly.
>> Doe any one here use one for 2M SSB? What are your experiences?
>>
>> Thanks
>> Russ
>>
> Stack another yagi so you can reply to what you hear.
>
>
If he has room for it, this may very well be the best way to go. Gets away from finding an amp that can take 500W on transmit, and does away with complicated sequencing, which, if not done right could blow the amp if you accidentally use VOX. For starters, replacing the 706 will probably result in the best fun factor.

Tam/WB2TT

2668. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 14:40:12 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <M7ednTEYgbvMxILanZ2dnUVZ8q-rnZ2d@pipex.net>
Source record: 35100

> Try transmitting up and down the band to see where your lowest swr is.
> Then you can shorten or lengthen the antenna a bit to get a low swr in
> the 28.4 mhz range. If you can't quite get it to 1:1, coiling the coax
> at the feedpoint, 4 or 5 turns about 6 inches in diameter can get you
> pretty close to 1:1.
>
> 2:1 isn't bad, but you're probably not getting full power output if
> your rig is solid state.
==========
When SWR is 2:1 the reflected power is only 11% of the tx output power,
which will hardly be noticeable at the receiving end .
Even when SWR would be 3:1 only 25% of the transmitter power would be
reflected , still resulting in only a fraction of an S-point at the
receiving end.
But a low SWR will make the solid state PA of your radio feel happier !

Frank GM0CSZ / KN6WH

2669. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 20:46:52 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D444EE3898Fnonenowhere@61.9.191.5>
Source record: 35101

Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com> wrote in
news:M7ednTEYgbvMxILanZ2dnUVZ8q-rnZ2d@pipex.net:

>> Try transmitting up and down the band to see where your lowest swr is.
>> Then you can shorten or lengthen the antenna a bit to get a low swr in
>> the 28.4 mhz range. If you can't quite get it to 1:1, coiling the coax
>> at the feedpoint, 4 or 5 turns about 6 inches in diameter can get you
>> pretty close to 1:1.
>>
>> 2:1 isn't bad, but you're probably not getting full power output if
>> your rig is solid state.
> ================================
> When SWR is 2:1 the reflected power is only 11% of the tx output
power,
> which will hardly be noticeable at the receiving end .
> Even when SWR would be 3:1 only 25% of the transmitter power would be
> reflected , still resulting in only a fraction of an S-point at the
> receiving end.
> But a low SWR will make the solid state PA of your radio feel happier !

Frank, your analysis ignores the fact that the PA may deliver other than its rated power into the actual load, it could be higher or lower power, but in radios that incorporate VSWR protection of the PA, it is most likely to be lower, and at 3:1, substantially lower.

VSWR protection helps protect radios operated by operators with the view that 'anything works'.

To me, 2:1 seems a bit poor for such a simple antenna and probably readily capable of improvement to 1.5:1 or better. More importantly, the OP might expand their knowledge in the process.

The original description was scant on information about the configuration, and I guess that sometimes, knowing how to describe the configuration / problem is the first step of knowing how to solve it.

Others have identified missing elements of the description, the use or otherwise of a balun is relevant in indicating the extent to which common mode feed line current plays a part in determining the load presented to the feedline.

Owen

2670. Re: Plotting antenna pattern from Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 20:52:37 UTC
From: Jim Lux <james.p.lux@jpl.nasa.gov>
Message-ID: <ffobal$878$1@news.jpl.nasa.gov>
Source record: 35102

Owen Duffy wrote:
> "Jerry Martes" <j.jmartes@verizon.net> wrote in
> news:QFxTi.27907$DX.11271@trnddc06:
>
>
>>does not charge for his program. He is an amateur, interested in
>>providing good data, and I consider you to be a good critic.
>
>
> Hi Jerry,
>
> That is flattering, but undeserved I am sure.
>
> There are a lot of calculators on the 'net for giving the Sun's position
> at a place and time, and they use varying algorithms for more or less
> accuracy.
>
> The routines I used in the spreadsheet were unashamedly the work of some
> one else, the chap who converted them to VBA and the original NOAA
> javascript routines behind their page at
> http://www.srrb.noaa.gov/highlights/sunrise/azel.html . I have accepted
> they were good enough for my application, and they seemed quite close to
> another navigator application that I have.
>

And, really, what precision do you need for pointing/plotting?

Presumably folks are looking at fairly wide beamwidths (so that the sun
size (1/2degree) is a small fraction of the beamwidth)
5 degrees?
1 degree?

Get into that 1 degree range and you need to start taking into account
stuff like the non-spherical earth, and stuff like the sun's apparent
diameter (which is different for radio and visible light, as well as
varying with the distance).

Heck, you might have to worry about whether your local gravity vector
(presumably what you used to set the elevation zero point) is
perpendicular to the geoid surface used for the look angle calculation.
And, whether your zero az is actually the same north as used in the look
calculation (as opposed to, say, aligned to Polaris at some arbitrary time)

(FWIW, the calculations behind the USNO page do take a lot of this stuff
into account)

> Owen
>

2671. Re: Plotting antenna pattern from Sun noise

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 21:30:52 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D44C639FE5Fnonenowhere@61.9.191.5>
Source record: 35103

Jim Lux <james.p.lux@jpl.nasa.gov> wrote in
news:ffobal$878$1@news.jpl.nasa.gov:

...
> And, really, what precision do you need for pointing/plotting?
>
> Presumably folks are looking at fairly wide beamwidths (so that the
> sun size (1/2degree) is a small fraction of the beamwidth)
> 5 degrees?
> 1 degree?
>

Jim, I suggested in my article that the Sun technique was most suited for beamwidths down to about 3 deg. As you have noted, there are a large number of other factors that become relevant at small beamwidths, and the most significant I think is the beamwidth correction factor to account for the Sun's departure from being close to a point source, then as you note the frequency dependent diameter of the radio Sun and the distribution of the Sun's intensity.

So, down to 3 deg, the macros and formulae in my spreadsheet should be more than adequate.

My thinking was that if you have a narrower antenna beamwidth, you probably have sufficiently high G/T to use one of the radio stars which will have much lower diameter.

Owen

2672. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-24 23:54:27 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193270067.308423.135930@e9g2000prf.googlegroups.com>
Source record: 35104

On 20 Oct, 11:42, n...@wt.net wrote:
> On Oct 20, 11:34 am, "Mike Kaliski" <michael.kali...@tesco.net> wrote:
>
>
>
> > I agree. Incidently the origin of the idea for fractal antennae apparently
> > arose from the observation that hanging down the ends of a dipole, or
> > bending it to fit a limited site didn't affect the efficiency too much. A
> > university student decided to see just how much bending and could take place
> > before the antenna became unusable and hey presto, the fractal antenna was
> > invented and he had a thesis for his degree.
>
> > Mike G0ULI
>
> Just linear loading with a fancy name..
> Or the way I see it anyway..
> The thing is... Most consider linear loading as
> inferior to high Q coil loading,

A coil is linear loading as well
so a coil is just a fancy name?

"Most consider" agaim it looks like science is judged like the polls!

as long as the
> coils are placed at the proper locations to
> maximize current distribution.
> But I can see their use in small items like
> cell phones, etc..
> I doubt if I would use one as a ham radio antenna
> though.
> Heck, my 160m "Z" dipole could be considered a
> fractal. Even a dipole qualifies. All symmetrical
> antennas can be called "fractals" if you wanted to
> be strict about it.
> MK

2673. Re: 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 00:08:48 UTC
From: 998cc <hrd998cc@yahooo.com>
Message-ID: <l8RTi.580$Nz7.124@nlpi070.nbdc.sbc.com>
Source record: 35105

>>>
>> Stack another yagi so you can reply to what you hear.
>>
>>
> If he has room for it, this may very well be the best way to go. Gets away
> from finding an amp that can take 500W on transmit, and does away with
> complicated sequencing, which, if not done right could blow the amp if
> you accidentally use VOX. For starters, replacing the 706 will probably
> result in the best fun factor.
>
> Tam/WB2TT
>
Tam, that would be great, but I live in a community with CC&R's and antenna restrictions. I was barely able to get permission for my single yagi by using 911 and the Loma Prieta earthquake as bases for arguments. I really don't want to push the issue too hard. I do agree that looking into a better radio is probably the first step. If they made a VHF/UHF radio with similar features to the Icom 756 Pro-III, I'd grab it in a heartbeat. Otherwise, the antenna and feedline will be optimized as time permits.

73.

Russ
W6OHM

2674. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 03:30:19 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ffp2kdalu1@news.albasani.net>
Source record: 35106

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

Actually, if it performs as stated, a rather important step forward! At this point, who knows:

http://www.ad-hoc-news.de/Aktie/12717491/News/13865716/SOFTWARE.html

JS

2675. ARRL attempts to toss spoke in the wheels of progress ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 04:37:47 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ffp6ir$t9h$1@news.albasani.net>
Source record: 35107

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

http://www.news.com/8300-10784_3-7-0.html?keyword=broadband+over+power+lines

JS

2676. Re: Stainless Hardware Lesson

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 06:01:21 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <keydnblC7sGgrL3anZ2dnUVZ_rmjnZ2d@giganews.com>
Source record: 35108

Fred McKenzie wrote:
> pdrahn wrote:
>
> > Retapping won't help, unless you have an oversized tap.
>
> Paul-
>
> I understand there is also a "thread chaser" tap, which might be
> slightly oversized. I was thinking about the distorted threads being
> cleaned up by re-tapping. Perhaps one of the local hardware stores will
> have a 3/8-24 tap, as well as some anti-seize compound.
>
> I contacted New-tronics by E-Mail. They also suggested heating the
> female threaded part with a torch. They apparently have encountered the
> problem before, but their instruction sheets never mentioned it or the
> need for an anti-seize compound.
>
> Also, New-tronics does not sell parts, only complete assemblies!
>
> Fred
> K4DII

There are two basic types of taps: thread-cutting taps and thread-forming taps (also called "roll taps"). They work just as described... the former removes material to make threads, while the latter pushes material to make threads. Roll taps are used to make threads in soft materials (mainly aluminum, copper, and the like) but can also be used to chase threads that have already been cut/formed. Your local machine tool supplier or McMaster-Carr (http://www.mcmaster.com/) or MSC Industrial Supply (http://www.mscdirect.com/) should have them.
Bryan WA7PRC

2677. Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 06:20:55 UTC
From: JERD <jedunk@REMOVEbigpond.net.au>
Message-ID: <bBWTi.4367$CN4.3308@news-server.bigpond.net.au>
Source record: 35109

I am wanting to install an earth stake/rod for a new antenna system. The problem I have is that the 'best' position for this falls somewhere near where our underground sewer pipes run. As accurate measurements that I can ascertain from the engineering drawings puts it somewhere within 3" (75mm) of this sewer pipe and I am not prepared to rely on the accuracy of the drawing and or the pipes installer and end up puncturing the sewer pipe!

I could drill a hole in a concrete path and sink the earth stake/rod through the concrete path and this raises the question! Is this likely to be a good position to put an earth stake/rod seeing the ground under the concrete path would never get seasonal rain and in fact has not seen seasonal rain for some 30 years!

Does this matter or is good old mother earth still going to provide a good earth for my antenna system?

Sure would appreciate some advice regarding this.

VK5JE - from way 'down under'!

2678. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 07:51:12 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <UVXTi.55847$054.18637@newsfe14.phx>
Source record: 35110

"Dave Typinski" <nospam@nospam.net> wrote in message
news:ac3nh31om4h7gvb2h4ff7131nqbuqccuik@4ax.com...

< snip >

> 125 km at 2.4 GHz? How's that work? What were they bouncing the
> signal off of? That's definitely further than line of sight.
> --
> Dave Typinski
> AJ4CO

Our local microwave hams like mountaintops. Kansas microwave hams, not so
much.

"Sal"
(California)

2679. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 08:49:16 UTC
From: gsm@mendelson.com
Message-ID: <slrnfi0lto.jrk.gsm@cable.mendelson.com>
Source record: 35111

JERD wrote:
> Does this matter or is good old mother earth still going to provide a good
> earth for my antenna system?

I think you should look at an alternative ground system. For example,
a copper "matt" laid over the sewer pipes instead of between them.

If you have a decent earthworm population, you can lay it down on the
ground and in a few years it will be buried. I'm assuming that you
want something for HF work, so the size of the "squares" can be fairly
large, there is no reason to use screening.

If you are looking for an electrical saftey ground, for example as
lightening protection, then a horizontal ground rod will do. Bury it
below the "frost line" and you should be ok.

Geoff.

--
Geoffrey S. Mendelson, Jerusalem, Israel gsm@mendelson.com N3OWJ/4X1GM
IL Voice: (07)-7424-1667 U.S. Voice: 1-215-821-1838
Visit my 'blog at http://geoffstechno.livejournal.com/

2680. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 11:06:07 UTC
From: wood@itd.nrl.navy.mil
Message-ID: <wood-2510070706070001@jbw-mac.itd.nrl.navy.mil>
Source record: 35112

In article <13hktfiodabeac4@corp.supernews.com>, Roy Lewallen
<w7el@eznec.com> wrote:
> Meander line antennas, including "fractals", share the same properties
> as other electrically short antennas: narrow bandwidth and high
> conductor current. The latter can result in poor efficiency due to I^2 *
> R loss. Meander lines are better than some other methods of loading and
> worse than others, depending on how the meander and other methods are
> implemented. It's just one of the techniques which antenna designers
> have in their bag of techniques to use.
>
> Roy Lewallen, W7EL

Hello, and you make some good points, Roy. (I always pay close attention to many of Steve Best's IEEE papers on antennas). While I've not analyzed or experimented with antennas based upon fractal patterns I have always wondered whether broadband performance could be achieved since fractal patterns would repeat with electrical (frequency) scaling. Granted, these patterns unlike, say a logarithmic spiral, would only repeat at discrete values. Your comment above indicates this is not the case, however.
Sincerely, and 73s from N4GGO,

John Wood (Code 5550) e-mail: wood@itd.nrl.navy.mil
Naval Research Laboratory
4555 Overlook Avenue, SW
Washington, DC 20375-5337

2681. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 11:20:13 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <wZWdnfcC3dtz5r3anZ2dnUVZ_sfinZ2d@bright.net>
Source record: 35113

And up North, we like rain scatter...

Scott
N0EDV

Sal M. Onella wrote:
> "Dave Typinski" <nospam@nospam.net> wrote in message
> news:ac3nh31om4h7gvb2h4ff7131nqbuqccuik@4ax.com...
>
> < snip >
>
>>125 km at 2.4 GHz? How's that work? What were they bouncing the
>>signal off of? That's definitely further than line of sight.
>>--
>>Dave Typinski
>>AJ4CO
>
>
> Our local microwave hams like mountaintops. Kansas microwave hams, not so
> much.
>
> "Sal"
> (California)
>
>

--
Scott
http://corbenflyer.tripod.com/
Gotta Fly or Gonna Die
Building RV-4 (Super Slow Build Version)

2682. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 11:27:13 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1193311633.670341.27750@d55g2000hsg.googlegroups.com>
Source record: 35114

>
> > 2:1 isn't bad, but you're probably not getting full power output if
> > your rig is solid state.
>
> ================================
> When SWR is 2:1 the reflected power is only 11% of the tx output power,
> which will hardly be noticeable at the receiving end .
> But a low SWR will make the solid state PA of your radio feel happier !
>
> Frank GM0CSZ / KN6WH

Frank, I know that you know this, but I want to comment to the group...
Assuming the transmitter does not fold back, the 11% reflected power will not change the signal strength... The reflected 11% will be 88% radiated on the return trip (minus any line losses) and 88% of that on the next round trip, etc... So, in the end the decrease in transmitted power is only a fraction of 1% for feedlines with low losses to start with... W2DU's very readable book REFLECTIONS, would be a good place to start for those who are a bit hazy on transmission lines, reflections, conjugate mirrors, etc....

Now, if we take transmitter foldback into consideration, we will need a lot of information about the various rigs before we can even begin to discuss how much a 2:1 SWR will change radiated power...
Personally, for a situation where there is SWR on the line, I prefer a DX100B - it's pi-net could not care less and will still put out full power into 2 or 3 to 1... As well as some more modern rigs such as TS-830, etc... Tubes have a lot going for them... The Omni series of solid state rigs from Ten Tec also do not fold back under 2:1, though 3:1 does have some effect...

cheers ... denny / k8do

2683. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 11:50:48 UTC
From: Jeff <jeff@local.host>
Message-ID: <4720834a$0$1341$834e42db@reader.greatnowhere.com>
Source record: 35116

> Assuming the transmitter does not fold back, the 11% reflected power
> will not change the signal strength... The reflected 11% will be 88%
> radiated on the return trip (minus any line losses) and 88% of that on
> the next round trip, etc...]

That will only be true IF the Tx output stage has an infinite SWR looking back in to it, AND the reflection is in phase with the forward signal. In practice this will not happen. In fact the re-reflected signal may be 180degrees out of phase and so diminish the signal by its total value. The real story is that a much smaller proportion of the reflected signal will be re-reflected and the phase will depend on the system in use.

In reality the impedance of a transistor o/p stage looking back in will not be too far away from 50 ohms due to the broadband matching networks.Some transmitters that I have worked on even had a spec on the impedance looking back in, a real pain to measure under full power conditions.

73
Jeff

2684. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 11:54:07 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <ffq056$qe6$1@aioe.org>
Source record: 35115

"Denny" wrote:
> Assuming the transmitter does not fold back, the 11% reflected power
> will not change the signal strength... The reflected 11% will be 88%
> radiated on the return trip (minus any line losses) and 88% of that on
> the next round trip, etc... So, in the end the decrease in
> transmitted power is only a fraction of 1% for feedlines with low
> losses to start with ...

> Now, if we take transmitter foldback into consideration, ...

If, as reported, more than 99% of the output power of a transmitter ultimately is absorbed/radiated even by a mismatched antenna system, then why would a transmitter need power foldback for such loads?

RF

2685. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 13:03:50 UTC
From: John Passaneau <w3jxp@arrl.net>
Message-ID: <Xns99D45C3537253jxp16psuedu@128.118.141.40>
Source record: 35117

gsm@mendelson.com (Geoffrey S. Mendelson) wrote in
news:slrnfi0lto.jrk.gsm@cable.mendelson.com:

> JERD wrote:
>> Does this matter or is good old mother earth still going to provide a
>> good earth for my antenna system?
>
> I think you should look at an alternative ground system. For example,
> a copper "matt" laid over the sewer pipes instead of between them.
>
> If you have a decent earthworm population, you can lay it down on the
> ground and in a few years it will be buried. I'm assuming that you
> want something for HF work, so the size of the "squares" can be fairly
> large, there is no reason to use screening.
>
> If you are looking for an electrical saftey ground, for example as
> lightening protection, then a horizontal ground rod will do. Bury it
> below the "frost line" and you should be ok.
>
> Geoff.
>
>
I would hope that it's for electrical safety as a ground rod has little use as an RF ground. At best it's no better than an 8' ground radial. A ground for lighting and electrical safety is a good thing but should be used in parallel with an RF ground (radials or ground mat) for antennas.

John Passaneau W3JXP

2686. Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 14:06:35 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193321195.076414.246500@22g2000hsm.googlegroups.com>
Source record: 35118

Gentlemen
In constructing "slow wave" antennas for top band I am finding that a
wavelength in equilibrium is a bit longer than expected.
As I am using large diameter formers for circular radiation I suspect
the reduction in number of turns is the reason.
Does anybody know of a turns versus length graph has been made for
this phenomina and where I could find it?
At present I start with scaling up a Tesla coil as a starting point
but that is becomming somewhat laborious after winding a few antennas.
(I will be placing a photo of my antenna on my page in a few days)
TIA
Regards
Art Unwin KB9MZ.....XG (uk)

2687. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 14:33:02 UTC
From: Ed Cregger <ecregger@bellsouff.net>
Message-ID: <6O1Ui.18554$N7.17021@bignews7.bellsouth.net>
Source record: 35119

Just think of the salads that you could make in that giant salad bowl!!! <G>

Ed, NM2K

2688. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 14:56:00 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <382Ui.790$nN3.537@newssvr17.news.prodigy.net>
Source record: 35120

JERD wrote:
> Does this matter or is good old mother earth still going to provide a good
> earth for my antenna system?

What is the function of the earth stake?
e.g. lightning protection? Counterpoise?
Increased gain?
--
73, Cecil http://www.w5dxp.com

2689. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 15:11:22 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <um2Ui.793$nN3.58@newssvr17.news.prodigy.net>
Source record: 35121

Denny wrote:
> Assuming the transmitter does not fold back, the 11% reflected power
> will not change the signal strength...

True if a match has been achieved by a network.
A 100 watt source will provide 112.4 watts of forward
power with 12.4 watts of reflected power.

Power delivered to the load is 112.4w - 12.4w = 100w

Not true where a 100 watt 50 ohm source is not matched
and provides 100 watts forward with 11 watts reflected.

Power delivered to the load is 100w - 11w = 89w
--
73, Cecil http://www.w5dxp.com

2690. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 15:16:58 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Jr2Ui.794$nN3.659@newssvr17.news.prodigy.net>
Source record: 35122

Jeff wrote:
>> Assuming the transmitter does not fold back, the 11% reflected power
>> will not change the signal strength... The reflected 11% will be 88%
>> radiated on the return trip (minus any line losses) and 88% of that on
>> the next round trip, etc...]
>
> That will only be true IF the Tx output stage has an infinite SWR looking
> back in to it, AND the reflection is in phase with the forward signal. In
> practice this will not happen.

How about this?

50 ohm
100w TX-------1/2WL Z0=100 ohm feedline--------50 ohm load

--
73, Cecil http://www.w5dxp.com

2691. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 15:22:49 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <dx2Ui.60646$Um6.3651@newssvr12.news.prodigy.net>
Source record: 35123

art wrote:
> Gentlemen
> In constructing "slow wave" antennas for top band I am finding that a
> wavelength in equilibrium is a bit longer than expected.
> As I am using large diameter formers for circular radiation I suspect
> the reduction in number of turns is the reason.
> Does anybody know of a turns versus length graph has been made for
> this phenomina and where I could find it?
> At present I start with scaling up a Tesla coil as a starting point
> but that is becomming somewhat laborious after winding a few antennas.
> (I will be placing a photo of my antenna on my page in a few days)

Here you go, Art. Equation 32 and Fig. 1 should be within
10% of what you need assuming your device meets the test
equation boundaries given between Equation 31 and Equation 32.

http://www.ttr.com/TELSIKS2001-MASTER-1.pdf
--
73, Cecil http://www.w5dxp.com

2692. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 15:53:26 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193327606.279899.319950@k79g2000hse.googlegroups.com>
Source record: 35124

On 25 Oct, 08:22, Cecil Moore <nos...@w5dxp.com> wrote:
> art wrote:
> > Gentlemen
> > In constructing "slow wave" antennas for top band I am finding that a
> > wavelength in equilibrium is a bit longer than expected.
> > As I am using large diameter formers for circular radiation I suspect
> > the reduction in number of turns is the reason.
> > Does anybody know of a turns versus length graph has been made for
> > this phenomina and where I could find it?
> > At present I start with scaling up a Tesla coil as a starting point
> > but that is becomming somewhat laborious after winding a few antennas.
> > (I will be placing a photo of my antenna on my page in a few days)
>
> Here you go, Art. Equation 32 and Fig. 1 should be within
> 10% of what you need assuming your device meets the test
> equation boundaries given between Equation 31 and Equation 32.
>
> http://www.ttr.com/TELSIKS2001-MASTER-1.pdf
> --
> 73, Cecil http://www.w5dxp.com

Thanks so much for that article by the most formost
scientists on this subject.
I have not made things easier on myself lately as I
have migrated to tinned
copper braid for extra gain which obviously increases
the slow wave length somewhat because of the added
indunctance which some would considered as being cancelled Hi.
At first I was considering the actual wire length
in the braiding b ut that influence became little
compared to the current pertabutations. Also have
found that the standing waves do not completely
disapear until the top band radiator is up at a
one wave height which was a bit of a dissapointment
but still acceptable at 850 feet.
Thanks again for what appears to be a jewel
Art Unwin KB9MZ....XG....(uk)
Can't wait to add a flyback transformer so I can
make a radio wave missile launcher.

2693. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 16:38:19 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <%D3Ui.460$yV6.374@newssvr25.news.prodigy.net>
Source record: 35125

art wrote:
> At first I was considering the actual wire length
> in the braiding b ut that influence became little
> compared to the current pertabutations.

Sounds like you are working on a self-resonant coil
and need to know the length of time for the current
to flow from end to end.

Both sides of the argument are wrong on that one.
The current does not jump from one end of a coil to
the other in a very small number of nanoseconds as
one "expert" has asserted which implies a VF close
to 1.0. Neither does the current follow the wires
directly round and round the coil as asserted by the
other side which would imply a VF around 0.01.

The actual measurable VF of a coil seems to be just
about double the round-and-round argument side as
there is indeed some coupling between adjacent coils.
A typical 75m Texas Bugcatcher 6" dia, 6.5" long,
4 tpi coil has a VF of around 0.02 making it about
40 degrees long at 3.8 MHz.
--
73, Cecil http://www.w5dxp.com

2694. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 17:07:14 UTC
From: richardharrison@webtv.net
Message-ID: <551-4720CD42-350@storefull-3251.bay.webtv.net>
Source record: 35126

JERD wrote:
"Does it matter or is good old mother earth still going to provide a good earth for my antenna system?'

According to B. Whitfield Griffith, Jr. in "Radio-Electronic Transmission Fundamentals" on page 351, a single ground rod introduces about 50 ohms to an antenna`s resistance. He says contact resistance to the soil may be very low but the loss will be in the large area of soil surrounding the rod. Radials are the answer to the low soil conductivity probl;em.

A broadcast grounding system of 120 radials, each 1/4-wavelength long, may have a ground resistance of about one ohm, as shown in Fig. 43-2 on page 353.

Best regards, Richard Harrison, KB5WZI

2695. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 17:27:49 UTC
From: richardharrison@webtv.net
Message-ID: <551-4720D215-351@storefull-3251.bay.webtv.net>
Source record: 35128

Cecil, W5DXP wrote:
"Increased gain?"

That is correct when considering "power gain" of an antenna, which is, power into some reference antenna / power into the gain antenna in the same direction.

"Directive gain" of an antenna has nothing to do with losses.

Best regards, Richard Harrison, KB5WZI

2696. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 17:28:44 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193333324.961929.217440@z9g2000hsf.googlegroups.com>
Source record: 35127

On 25 Oct, 09:38, Cecil Moore <nos...@w5dxp.com> wrote:
> art wrote:
> > At first I was considering the actual wire length
> > in the braiding b ut that influence became little
> > compared to the current pertabutations.
>
> Sounds like you are working on a self-resonant coil
> and need to know the length of time for the current
> to flow from end to end.
>
> Both sides of the argument are wrong on that one.
> The current does not jump from one end of a coil to
> the other in a very small number of nanoseconds as
> one "expert" has asserted which implies a VF close
> to 1.0. Neither does the current follow the wires
> directly round and round the coil as asserted by the
> other side which would imply a VF around 0.01.
>
> The actual measurable VF of a coil seems to be just
> about double the round-and-round argument side as
> there is indeed some coupling between adjacent coils.
> A typical 75m Texas Bugcatcher 6" dia, 6.5" long,
> 4 tpi coil has a VF of around 0.02 making it about
> 40 degrees long at 3.8 MHz.
> --
> 73, Cecil http://www.w5dxp.com

No Cecil you are following a fatal aproach by using
lumped loaded circuitry which is a no no when measuring current speed.
Especially when you are following a path of zero standing waves.
To obtain a voltage doubling you can only solve by using
distributed loading aproach where a single wire has approx length
when measured close to the ground short of two wavelengths .
Unfortunately by using braid to get extra current perbutatation
the length extends quite a bit longer even tho braiding electrical
length is longer that the physical measurement.
Ofcourse the introduction of a flyback transformer would be
exciting but we must not run before we walk
Regards
Art

2697. Re: Fractal 10m Antenna

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 18:21:14 UTC
From: richardharrison@webtv.net
Message-ID: <23817-4720DE9A-250@storefull-3254.bay.webtv.net>
Source record: 35130

John Doe wrote:
"I have a lot of time on my hands."

I recall the Fractenna man, Dr. Chip Cohen, used to define fractals as self similar elements assembled to cover a wide range of frequencies.

That roughly conforms to Kraus, "structures that preserve their shapes at different scales."

Kraus` conical spiral and log periodic antennas in Figure 310 on page 68 of the 3rd edition of "Antennas" also seem to fit the repeating structures of different scales designed to produce very broad bandwidth with moderate gain and might be called fractals.

Best regards, Richard Harrison, KB5WZI

2698. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 18:32:51 UTC
From: Mike Kaliski <michael.kaliski@tesco.net>
Message-ID: <2ICdncDAwM3afL3aRVnyjwA@bt.com>
Source record: 35129

"art" <aunwin@insightbb.com> wrote in message
news:1193333324.961929.217440@z9g2000hsf.googlegroups.com...
> On 25 Oct, 09:38, Cecil Moore <nos...@w5dxp.com> wrote:
>> art wrote:
>> > At first I was considering the actual wire length
>> > in the braiding b ut that influence became little
>> > compared to the current pertabutations.
>>
>> Sounds like you are working on a self-resonant coil
>> and need to know the length of time for the current
>> to flow from end to end.
>>
>> Both sides of the argument are wrong on that one.
>> The current does not jump from one end of a coil to
>> the other in a very small number of nanoseconds as
>> one "expert" has asserted which implies a VF close
>> to 1.0. Neither does the current follow the wires
>> directly round and round the coil as asserted by the
>> other side which would imply a VF around 0.01.
>>
>> The actual measurable VF of a coil seems to be just
>> about double the round-and-round argument side as
>> there is indeed some coupling between adjacent coils.
>> A typical 75m Texas Bugcatcher 6" dia, 6.5" long,
>> 4 tpi coil has a VF of around 0.02 making it about
>> 40 degrees long at 3.8 MHz.
>> --
>> 73, Cecil http://www.w5dxp.com
>
> No Cecil you are following a fatal aproach by using
> lumped loaded circuitry which is a no no when measuring current speed.
> Especially when you are following a path of zero standing waves.
> To obtain a voltage doubling you can only solve by using
> distributed loading aproach where a single wire has approx length
> when measured close to the ground short of two wavelengths .
> Unfortunately by using braid to get extra current perbutatation
> the length extends quite a bit longer even tho braiding electrical
> length is longer that the physical measurement.
> Ofcourse the introduction of a flyback transformer would be
> exciting but we must not run before we walk
> Regards
> Art
>
Art

I think you cannot rely on calculating the braided length as being longer than the physical length. While it is true that the braided wire if unravelled would likely be considerably longer, RF waves propagate along the surface of the wire. They will jump from one wire to the next where the braids cross, following the path of least resistance. You would probably need to use braided Litz wire, where each strand is individually enamelled to achieve what you appear to be trying to do.
Regards
Mike G0ULI

2699. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 18:43:49 UTC
From: JERD <jedunk@REMOVEbigpond.net.au>
Message-ID: <Ft5Ui.4868$CN4.807@news-server.bigpond.net.au>
Source record: 35131

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:382Ui.790$nN3.537@newssvr17.news.prodigy.net...
> JERD wrote:
>> Does this matter or is good old mother earth still going to provide a
>> good earth for my antenna system?
>
> What is the function of the earth stake?
> e.g. lightning protection? Counterpoise?
> Increased gain?
> --
> 73, Cecil http://www.w5dxp.com

The function of the earth stake is to 'ground' my new HF ham rig and also
the AT-4 automatic antenna tuner.

JERD - (Original poster)
VK5JE

2700. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 19:24:31 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D536F7C49D6nonenowhere@61.9.191.5>
Source record: 35132

"JERD" <jedunk@REMOVEbigpond.net.au> wrote in
news:Ft5Ui.4868$CN4.807@news-server.bigpond.net.au:

...
> The function of the earth stake is to 'ground' my new HF ham rig and
> also the AT-4 automatic antenna tuner.
...

Jerd,

Nothing here stated AC protective ground (which comes from the earth pin in your three wire power socket) or lightning ground.

You have identified that you want to attach the second output terminal of the AH4 to the electrode. The proposed electrode (whether or not it is throught the path) is likely to have a resistance that results in a low antenna system efficiency at frequencies where the radiation resistance of the antenna is relatively low.

The article at http://www.vk1od.net/InvertedL/InvertedL.htm models a scenario that is probably quite similar to that which you are considering, and discusses points relevant to the design... could be worth a read.

Now, there will be a body of opinion that it doesn't matter what you do, you will still get QSOs, that it therefore 'works'. It sounds from your question that you are more interested in that shallow level of engagements, so read around.

I wrote another article on a minimal setup again with an AH4 and end fed wire, it is at http://www.vk1od.net/NaroomaEFW/NaroomaEFW.htm .

By all means, drive an earth electrode as you have proposed principally for lightning protection (though I would use a 2.4m copper clad steel electrode), but run at least a couple of (untuned) shallow buried bare copper radial wires from the AH4. Locating the AH4 remotely from your shack and house if you can will reduce the RF intensity in those places and reduce EMC problems.

Catch you on air sometime.

Owen

2701. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 19:45:49 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Nn6Ui.2416$Bk.476@newssvr19.news.prodigy.net>
Source record: 35134

art wrote:
> No Cecil you are following a fatal aproach by using
> lumped loaded circuitry which is a no no when measuring current speed.

Nope, I'm arguing against that approach, Art. Some
"experts" seem to like lumped load concepts but not
I. Dr. Corum warns against using lumped load concepts
for large coils and I agree with him.
--
73, Cecil http://www.w5dxp.com

2702. Re: 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 19:45:57 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <9LudnZoK0tjwb73anZ2dnUVZ_rSrnZ2d@comcast.com>
Source record: 35133

"998cc" <hrd998cc@yahooo.com> wrote in message
news:l8RTi.580$Nz7.124@nlpi070.nbdc.sbc.com...
>>>>
>>> Stack another yagi so you can reply to what you hear.
>>>
>>>
>> If he has room for it, this may very well be the best way to go. Gets
>> away from finding an amp that can take 500W on transmit, and does away
>> with complicated sequencing, which, if not done right could blow the amp
>> if you accidentally use VOX. For starters, replacing the 706 will
>> probably result in the best fun factor.
>>
>> Tam/WB2TT
>>
> Tam, that would be great, but I live in a community with CC&R's and
> antenna restrictions. I was barely able to get permission for my single
> yagi by using 911 and the Loma Prieta earthquake as bases for arguments.
> I really don't want to push the issue too hard. I do agree that looking
> into a better radio is probably the first step. If they made a VHF/UHF
> radio with similar features to the Icom 756 Pro-III, I'd grab it in a
> heartbeat. Otherwise, the antenna and feedline will be optimized as time
> permits.
>
> 73.
>
> Russ
> W6OHM
>
A few years ago I bought an FT847 as a backup/VHF/UHF rig. Wish I had spent
a few hundred more for a TS2000. A friend has one, and it is very nice if
you don't mind the art deco styling.

Tam/WB2TT

2703. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 19:47:46 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193341666.963014.279700@d55g2000hsg.googlegroups.com>
Source record: 35135

On 25 Oct, 11:32, "Mike Kaliski" <michael.kali...@tesco.net> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1193333324.961929.217440@z9g2000hsf.googlegroups.com...
>
>
>
> > On 25 Oct, 09:38, Cecil Moore <nos...@w5dxp.com> wrote:
> >> art wrote:
> >> > At first I was considering the actual wire length
> >> > in the braiding b ut that influence became little
> >> > compared to the current pertabutations.
>
> >> Sounds like you are working on a self-resonant coil
> >> and need to know the length of time for the current
> >> to flow from end to end.
>
> >> Both sides of the argument are wrong on that one.
> >> The current does not jump from one end of a coil to
> >> the other in a very small number of nanoseconds as
> >> one "expert" has asserted which implies a VF close
> >> to 1.0. Neither does the current follow the wires
> >> directly round and round the coil as asserted by the
> >> other side which would imply a VF around 0.01.
>
> >> The actual measurable VF of a coil seems to be just
> >> about double the round-and-round argument side as
> >> there is indeed some coupling between adjacent coils.
> >> A typical 75m Texas Bugcatcher 6" dia, 6.5" long,
> >> 4 tpi coil has a VF of around 0.02 making it about
> >> 40 degrees long at 3.8 MHz.
> >> --
> >> 73, Cecil http://www.w5dxp.com
>
> > No Cecil you are following a fatal aproach by using
> > lumped loaded circuitry which is a no no when measuring current speed.
> > Especially when you are following a path of zero standing waves.
> > To obtain a voltage doubling you can only solve by using
> > distributed loading aproach where a single wire has approx length
> > when measured close to the ground short of two wavelengths .
> > Unfortunately by using braid to get extra current perbutatation
> > the length extends quite a bit longer even tho braiding electrical
> > length is longer that the physical measurement.
> > Ofcourse the introduction of a flyback transformer would be

> > exciting but we must not run before we walk
> > Regards
> > Art
>
> Art
> I think you cannot rely on calculating the braided length as being longer
> than the physical length. While it is true that the braided wire if
> unravelled would likely be considerably longer, RF waves propagate along the
> surface of the wire. They will jump from one wire to the next where the
> braids cross, following the path of least resistance. You would probably
> need to use braided Litz wire, where each strand is individually enamelled
> to achieve what you appear to be trying to do.
> Regards
> Mike G0ULI- Hide quoted text -
>
> - Show quoted text -

I see where you are coming from but braid wicks like mad so a good
dose of quick drying polythene varnish solves that problem IF it were
to
occur, tho the current will not jump but follow the path of resonance.
What I am doing now is a combination of insulated wire with doped
braiding
and it appears so far that the braid is required to be much longer.
When time permits I will make seperate models using wire and then with
braid
on a higher frequency where the single wire form is easily calculated
as a datum
As far as Litz wire goes there is a frequency transition line when you
use that
(skin factor) so I am not anxcious to introduce another variable or
spend
the required extra money.
Regarding travelling on the surface of the wire I have often pondered
that the use of braid for grounding wire is subject to question
compared
to a copper wire or ribbon. As I see it the braid is heavily inductive
even tho it has the appearance of the field balancing out since the
current must still traverse the windings, but that is another subject
all together
deserving of its own topic title.
I know it may sound wierd but I am trying to slow down the current by
half so that
for the tank circuit I will have four pulses of energy release over
the existing
two.Single wire windings are just a hair to fast to accomplish that
In other words double the power of a particle generator which is
what
radiation is all about, at least in my mind, since I see the
attributed gain of a helix

being controlled by the voltage increase in sync with the current flow
which I see as
not quite correct when using single wire since. I am still seeing
standing vaves which are small
but does not prevent full traverse of all amateur frequencies using a
single antenna with a
variometer for use when resistance levels drop below 20 ohms.
It just blows my mind how just applying a time varying field to a
static
field is providing so much more info with respect to radiation
assuming
one has a true understanding of what equilibrium is really all about
and which the majority deride
Cheers
Art. KB9mz

2704. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 19:48:35 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <nq6Ui.2417$Bk.867@newssvr19.news.prodigy.net>
Source record: 35136

JERD wrote:
> The function of the earth stake is to 'ground' my new HF ham rig and also
> the AT-4 automatic antenna tuner.

RF 'ground'? AC 'ground'? Lightning 'ground'? DC 'ground'?
--
73, Cecil http://www.w5dxp.com

2705. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 19:54:13 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193342053.996253.180950@57g2000hsv.googlegroups.com>
Source record: 35137

On 25 Oct, 12:45, Cecil Moore <nos...@w5dxp.com> wrote:
> art wrote:
> > No Cecil you are following a fatal aproach by using
> > lumped loaded circuitry which is a no no when measuring current speed.
>
> Nope, I'm arguing against that approach, Art. Some
> "experts" seem to like lumped load concepts but not
> I. Dr. Corum warns against using lumped load concepts
> for large coils and I agree with him.
> --
> 73, Cecil http://www.w5dxp.com

Good for him. It appears that constant use of lumped circuit analysis
is gaining more votes against true science of today especially in
amateur
radio. Soon it will be promoted to a Law disregarding that it is
only theory based. Something akin to a poll
Regards
Art.

2706. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 20:00:52 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1193342452.101761.323580@o38g2000hse.googlegroups.com>
Source record: 35138

On Oct 25, 11:11 am, Cecil Moore <nos...@w5dxp.com> wrote:
> Denny wrote:
> > Assuming the transmitter does not fold back, the 11% reflected power
> > will not change the signal strength...
>
> True if a match has been achieved by a network.
> A 100 watt source will provide 112.4 watts of forward
> power with 12.4 watts of reflected power.
>
> Power delivered to the load is 112.4w - 12.4w = 100w
>
> Not true where a 100 watt 50 ohm source is not matched
> and provides 100 watts forward with 11 watts reflected.
>
> Power delivered to the load is 100w - 11w = 89w
> --
> 73, Cecil http://www.w5dxp.com

Ahhh, ya namby pambys... My open wire feed line can lick your coax!
And the tuner is a conjugate mirror to boot...
nyaa, nyaa, nyaa...

denny / k8do

Oh yeah, and to add something constructive for the one questioner:
Foldback on transistor amps is to prevent RF voltages rising high
enough to puncture the transistor junction...
Tube radios with pi-net or pi-L tanks had enough matching capability
to handle significant impedence mismatch compared to broadband
transistor amps... Today, that function is served by autotuners, etc...

2707. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 20:43:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13i1vvot64nbmbe@corp.supernews.com>
Source record: 35139

My homebrew Field Day rig monitors only the "forward power" with a single directional coupler and adjusts the output level to keep the "forward power" constant. That rig delivers 83% of the power into a 2.38:1 SWR load as it does into a 1:1 SWR. This represents a 0.8 dB power reduction. Big deal.

But my 25 year old Icom 730 delivers a full 100 watts to the output regardless of the SWR up until it starts shutting down at around 3:1. For example, with a 2.38:1 SWR, the "forward power" is 120 watts and the "reverse power" is 20 watts. Aren't modern rigs able to do this, or have they gone to the simpler system like I use in my homebrew rig?

Roy Lewallen, W7EL

2708. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 21:04:43 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1193346283.377463.70250@k79g2000hse.googlegroups.com>
Source record: 35140

Umm a velocity factor of .50 might be attainable with a variation on leaky coax... Some of the cheap stuff is already as slow as .66...
Off the top of my pointy head braided wires wrapped on your form (same as you are currently doing) then potted in an appropriate dielectric material for filling the braid interstices should slow things down some more... The question extant is what material for potting (or for adding to your potting resin) will further slow progression of the wave front along the braid...
We know that solid polyethylene dielectric on coax results in a lower vf than the foamed materials.. So it appears that denser material results in slower wave progression... Perhaps UHMW, or similar might suffice...
Other thoughts come along, such as a flat ribbon with a deeply embossed pattern then filled with dielectric might be slower than braided wire... Or even a ribbon of screening material similarily filled...
Dunno... Interesting problem...

denny / k8do

2709. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 21:30:19 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D54C4B560C5nonenowhere@61.9.191.5>
Source record: 35041

Roy Lewallen <w7el@eznec.com> wrote in
news:13i1vvot64nbmbe@corp.supernews.com:

...
> But my 25 year old Icom 730 delivers a full 100 watts to the output
> regardless of the SWR up until it starts shutting down at around 3:1.
> For example, with a 2.38:1 SWR, the "forward power" is 120 watts and
the
> "reverse power" is 20 watts. Aren't modern rigs able to do this, or
have
> they gone to the simpler system like I use in my homebrew rig?

Roy,

Modern rigs often employ a range of protective devices that influence the
power delivered to the load.

Many of the modern Icom HF radios control:
- 'maximum output power' using either the forward output of a directional
coupler or a non directional sample of output;
- VSWR protection to limit maximum reflected power indicated by the
directional coupler, typically to a value that is equivalent to the
reflected power at rated output and specified maximum VSWR (eg 11W for a
transmitter rated at 100W and max VSWR=2:1);
- maximum collector current.

The actual power delivered to a severely mismatched load is affected by
all of these. It is likely for such a radio that with a 5 ohm load, the
radio will level 'reflected' power to 11W, 'forward' power would be
16.5W, output power would be 5.5W.

Depending on the way in which maximum output power is detected /
controlled, it is indeed possible to get more than rated output power, so
mismatch doesn't necessarily result in lower radiated power (despite
popular opinion).

Owen

2710. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 21:47:01 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <p98Ui.48409$RX.40080@newssvr11.news.prodigy.net>
Source record: 35042

Denny wrote:
> Dunno... Interesting problem...

Not really - a helix can slow down a wave by
a factor of 50 or more. Approximately a foot and
a half of 75m Texas Bugcatcher stock will be self-
resonant at 4 MHz. That's 90 degrees of antenna
stuffed into about a foot and a half of coil.
90 degrees at 4 MHz is 61.5 feet. The VF of that
coil is 1.5/61.5 = 0.024. Actually, pretty simple.
--
73, Cecil http://www.w5dxp.com

2711. Re: 2-meter Preamp?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 21:59:28 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D5513CAECF6nonenowhere@61.9.191.5>
Source record: 35043

"Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in
news:9LudnZoK0tjwb73anZ2dnUVZ_rSrnZ2d@comcast.com:

> A few years ago I bought an FT847 as a backup/VHF/UHF rig. Wish I had
> spent a few hundred more for a TS2000. A friend has one, and it is
> very nice if you don't mind the art deco styling.

Talking of 144Mhz (the context of the original posting)...

Competition means that all these guys claim similar SSB telephony sensitivity (measured in a shielded room) which corresponds to an equivalent noise temperature of about 600K.

A key issue is that on a real antenna, this 600K could easily be 6000K due to noise created by IMD in the receiver, and that doesn't show up on the spec sheets, you can only assess that in situ, and it varies from receiver to receiver and antenna to antenna. (The same issue exists with any preamp or LNA.)

Carrying on with the (slightly unrealistic) best case of a 600K receiver, used without a preamp and with say 1dB of line loss, your receiver equivalent noise temperature is nudging 700K which is probably adequate unless you are in the quietest of locations.

What 'works' for someone else isn't guaranteed to 'work' the same for everyone.

An interesting illustration was the case of one of my VHF neighbours who had a narrow filter (of the type used in two way radio duplexors) installed between his preamp and transceiver. I asked why that configuration and the answer was to minimise the loss in front of the preamp (0.5dB of filter loss would add 35K to the system noise temperature). On my suggestion, he moved it in front of the preamp and compared the difference in S/N on a beacon and it was noticeably better in front of the preamp, so despite the additional 35K, it had reduced preamp IMD noise by more than that amount.

You don't make contacts in a shielded room, don't depend entirely on shielded room perspectives for station design.

Owen

2712. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 22:18:41 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193350721.445492.154460@22g2000hsm.googlegroups.com>
Source record: 35044

On 25 Oct, 14:47, Cecil Moore <nos...@w5dxp.com> wrote:
> Denny wrote:
> > Dunno... Interesting problem...
>
> Not really - a helix can slow down a wave by
> a factor of 50 or more. Approximately a foot and
> a half of 75m Texas Bugcatcher stock will be self-
> resonant at 4 MHz. That's 90 degrees of antenna
> stuffed into about a foot and a half of coil.
> 90 degrees at 4 MHz is 61.5 feet. The VF of that
> coil is 1.5/61.5 = 0.024. Actually, pretty simple.
> --
> 73, Cecil http://www.w5dxp.com

Yes Cecil I see where you are coming from
but and it is a big but the turns must be
exposed to radiate and it is that that one
must not lose sight upon
Art

2713. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 23:15:16 UTC
From: Dave <noone@nowhere.com>
Message-ID: <8s9Ui.7866$BX2.5632@trndny09>
Source record: 35045

"art" <aunwin@insightbb.com> wrote in message
news:1193350721.445492.154460@22g2000hsm.googlegroups.com...
> On 25 Oct, 14:47, Cecil Moore <nos...@w5dxp.com> wrote:
>> Denny wrote:
>> > Dunno... Interesting problem...
>>
>> Not really - a helix can slow down a wave by
>> a factor of 50 or more. Approximately a foot and
>> a half of 75m Texas Bugcatcher stock will be self-
>> resonant at 4 MHz. That's 90 degrees of antenna
>> stuffed into about a foot and a half of coil.
>> 90 degrees at 4 MHz is 61.5 feet. The VF of that
>> coil is 1.5/61.5 = 0.024. Actually, pretty simple.
>> --
>> 73, Cecil http://www.w5dxp.com
>
> Yes Cecil I see where you are coming from
> but and it is a big but the turns must be
> exposed to radiate and it is that that one
> must not lose sight upon
> Art
>
try a ctha that may do what you want.

2714. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 23:19:15 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Tv9Ui.1198$%13.1140@newssvr22.news.prodigy.net>
Source record: 35046

art wrote:
> Yes Cecil I see where you are coming from
> but and it is a big but the turns must be
> exposed to radiate and it is that that one
> must not lose sight upon

I can only wish that my 75m Bugcatcher coil
had all of its losses going into radiation. :-)
--
73, Cecil http://www.w5dxp.com

2715. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-25 23:48:35 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13i2aql2c9mj8e3@corp.supernews.com>
Source record: 35047

Richard Fry wrote:
>
> If, as reported, more than 99% of the output power of a transmitter
> ultimately is absorbed/radiated even by a mismatched antenna system,
> then why would a transmitter need power foldback for such loads?

Egad, here we go again.

Foldback has nothing to do with "reflected power". It's simply that a mismatch results in higher voltage or current at the output which could damage the output device or circuitry. That's why foldback is used.

And, for that matter, "reflected power" isn't radiated *or* absorbed by the transmitter. The transmitter produces power which is sent to the antenna. All the power produced by the transmitter arrives at the antenna less whatever is lost as heat in the transmission line. There are no waves of average power bouncing back and forth on a transmission line. Mathematically separating the power moving down the line into "forward" and "reverse" components doesn't mean that waves of average power actually exist.

Roy Lewallen, W7EL

2716. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 00:38:27 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <7GaUi.48433$RX.26647@newssvr11.news.prodigy.net>
Source record: 35048

Roy Lewallen wrote:
> Foldback has nothing to do with "reflected power". It's simply that a
> mismatch results in higher voltage or current at the output which could
> damage the output device or circuitry. That's why foldback is used.

If the source is connected to a transmission line, the
mismatch results from a virtual impedance other than the
one for which the transmitter was designed. The virtual
impedance seen by the source is (Vfor+Vref)/(Ifor+Iref)
where Vfor is the forward voltage phasor and Vref is the
reflected voltage phasor. |Vfor|*|Ifor|=Pfor and
|Vref|*|Iref|=Pref If it were not for reflections,
the source would see Z0.

DEVIATIONS AWAY FROM Z0 ARE *CAUSED* BY REFLECTIONS!
Deviations away from the design impedance are what
causes foldback.

> There are no waves of average power bouncing back and forth
> on a transmission line.

One way for that to be true is for reflected energy waves
to contain zero energy but any rational person knows that
cannot be true. Reflected waves consist of an E-field and
an H-field whose ratio is Z0. ExB is watts. Watts are the
unit of power.

Do you really think that the EM waves bouncing back from
your mirror into your eyeballs while you shave contain
ExB = zero watts?
--
73, Cecil http://www.w5dxp.com

2717. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 01:24:10 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <ffrfjq$bl2$1@news.albasani.net>
Source record: 35049

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

http://www.arrl.org/news/stories/2007/10/25/102/?nc=1

JS

2718. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 01:43:30 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <47214641$0$32481$4c368faf@roadrunner.com>
Source record: 35050

"John Passaneau" <w3jxp@arrl.net> wrote in message
news:Xns99D45C3537253jxp16psuedu@128.118.141.40...
> gsm@mendelson.com (Geoffrey S. Mendelson) wrote in
> news:slrnfi0lto.jrk.gsm@cable.mendelson.com:
>
>> JERD wrote:
>>> Does this matter or is good old mother earth still going to provide a
>>> good earth for my antenna system?
>>
>> I think you should look at an alternative ground system. For example,
>> a copper "matt" laid over the sewer pipes instead of between them.
>>
>> If you have a decent earthworm population, you can lay it down on the
>> ground and in a few years it will be buried. I'm assuming that you
>> want something for HF work, so the size of the "squares" can be fairly
>> large, there is no reason to use screening.
>>
>> If you are looking for an electrical saftey ground, for example as
>> lightening protection, then a horizontal ground rod will do. Bury it
>> below the "frost line" and you should be ok.
>>
>> Geoff.
>>
>>
> I would hope that it's for electrical safety as a ground rod has little
> use as an RF ground. At best it's no better than an 8' ground radial. A
> ground for lighting and electrical safety is a good thing but should be
> used in parallel with an RF ground (radials or ground mat) for antennas.
>
> John Passaneau W3JXP

In my experience, I was using a random length long wire antenna using the electrical ground in my home's wiring. In my case I was generating so much RF feedback that it would get back into my switching power supply and cause the OVP SCR to conduct and shut down my whole system. Of course, my radio was part of my antenna system. Then I sank an 8 foot ground rod and connected it to my antenna/tuner/power supply ground and everything changed dramatically. No RF feedback at all that I could discern. My point being that, in my case, I would dispute your statement and say that my ground rod definately was better than an 8 foot radial, counterpoise et al. A good, deep ground rod in reasonably moist soil will turn the ground terminal on your radio into a true zero voltage reference point and stop allowing your antenna and mike/key to function as part of your antenna system. Of course, after I removed the long wire antenna and replaced it with a balanced

antenna, that also worked very well and today I am in a different location with a balanced into and only use my residences grounding system on the second floor, far from the service grounding point. But any time you plan on using "ground" or "earth" as the other half of your antenna, nothing seems to work as well as a good, deeply buried 8 foot ground rod no matter what the purpose; safety, RF etc.. I always thought that the grid grounds and radials were a waste of time. What can make a better ground than earth itself?

2719. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 02:28:21 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D57ED36BA57nonenowhere@61.9.191.5>
Source record: 35051

"Stefan Wolfe" <stefan@eml.com> wrote in
news:47214641$0$32481$4c368faf@roadrunner.com:

...
> foot radial, counterpoise et al. A good, deep ground rod in reasonably
> moist soil will turn the ground terminal on your radio into a true
> zero voltage reference point and stop allowing your antenna and

A simple proposition for sure... but if it was true, why does the rod need to be 8' long?

The only way that the ground terminal is a 'true zero voltage reference point' wrt the larger ground mass at RF is that if the connection to the ground mass is of zero length, and that isn't true either above or below the ground.

Owen

2720. Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 03:02:12 UTC
From: Art Clemons <n8blk@aolSPAM.com>
Message-ID: <6aCdnYF5P-koxbzanZ2dnUVZ_t3inZ2d@comcast.com>
Source record: 35052

I almost could not believe that an article that starts out with using an antenna tuner to deliver all possible power to mobile HF antennas got published.

I also noted that the testing antenna was 360 feet away.

I'm waiting to read on here that I've mis-understood a great method of measuring HF mobile antennas, but absent a troll or two, I don't expect too.

2721. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 03:26:50 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <47215e79$0$32509$4c368faf@roadrunner.com>
Source record: 35053

"Owen Duffy" <none@no.where> wrote in message
news:Xns99D57ED36BA57nonenowhere@61.9.191.5...
> "Stefan Wolfe" <stefan@eml.com> wrote in
> news:47214641$0$32481$4c368faf@roadrunner.com:
>
> ...
>> foot radial, counterpoise et al. A good, deep ground rod in reasonably
>> moist soil will turn the ground terminal on your radio into a true
>> zero voltage reference point and stop allowing your antenna and
>
> A simple proposition for sure... but if it was true, why does the rod need
> to be 8' long?

So that it penetrates reasonably deep feet into the earth. Exact length
isn't important but it needs to penetrate a good distance.

>
> The only way that the ground terminal is a 'true zero voltage reference
> point' wrt the larger ground mass at RF is that if the connection to the
> ground mass is of zero length, and that isn't true either above or below
> the ground.

With a radial system or mesh system, you are merely fabricating an artifical
counterpoise loosely connected to earth that may give one the perception
that true theoretical 'ground' is achieved, depending of course upon the
frequency in question. A connection to earth mass with a rod that has copper
copper cladding that reacts with the ph of the soil forms an oxide or
hydroxide compound that makes the steel in the ground rod electrically
homogeous with the surrounding soil, rendering the electrical potential of
the steel in the rod at "zero" with respect to RF radiation potentials,
lightening, the power generating generating station or conduction of
electrons in any sense. It is also possible to operate your station at
varying degrees of ground isolation, including a the use of a "virtual"
ground via calculated (and sometimes creative) use of counterpoises but that
does not work very well for most amateurs who use multiple bands, due to the
dependency of the length of the counterpoise(s) on the frequency in
question.

2722. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 03:45:45 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D58BF2A236Dnonenowhere@61.9.191.5>
Source record: 35054

"Stefan Wolfe" <stefan@eml.com> wrote in
news:47215e79$0$32509$4c368faf@roadrunner.com:

...
> With a radial system or mesh system, you are merely fabricating an
> artifical counterpoise loosely connected to earth that may give one
> the perception that true theoretical 'ground' is achieved, depending
> of course upon the frequency in question. A connection to earth mass
> with a rod that has copper copper cladding that reacts with the ph of
> the soil forms an oxide or hydroxide compound that makes the steel in
> the ground rod electrically homogeous with the surrounding soil,
> rendering the electrical potential of the steel in the rod at "zero"
> with respect to RF radiation potentials, lightening, the power
> generating generating station or conduction of electrons in any sense.

Do you sell copper clad ground rods?

With your creative explanation, you have missed your calling if you don't!

Owen

2723. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 04:08:00 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <47216822$0$28813$4c368faf@roadrunner.com>
Source record: 35055

"Owen Duffy" <none@no.where> wrote in message
news:Xns99D58BF2A236Dnonenowhere@61.9.191.5...
> "Stefan Wolfe" <stefan@eml.com> wrote in
> news:47215e79$0$32509$4c368faf@roadrunner.com:
>
> ...
>> With a radial system or mesh system, you are merely fabricating an
>> artifical counterpoise loosely connected to earth that may give one
>> the perception that true theoretical 'ground' is achieved, depending
>> of course upon the frequency in question. A connection to earth mass
>> with a rod that has copper copper cladding that reacts with the ph of
>> the soil forms an oxide or hydroxide compound that makes the steel in
>> the ground rod electrically homogeous with the surrounding soil,
>> rendering the electrical potential of the steel in the rod at "zero"
>> with respect to RF radiation potentials, lightening, the power
>> generating generating station or conduction of electrons in any sense.
>
> Do you sell copper clad ground rods?

As a matter of fact, no....i found out when visiting that hardware store
that others had apparently gotten into that business well before me so I
would have a problem with market penetration. But why do you ask?

>
> With your creative explanation, you have missed your calling if you don't!

I have lots of creative explanations. They cover such topics as "101 reasons
why pet rocks make good pets", "the Brooklyn bridge is really for sale" and
"The best earth ground is obtained by creating 180 1/4 wavelength radials
from the base of the vertical element".

2724. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 05:43:41 UTC
From: Sum Ting Wong <sumtingwong@privacy.net>
Message-ID: <59v2i31pun9ipldltj7ldl0893pak14hng@4ax.com>
Source record: 35056

On Thu, 25 Oct 2007 23:02:12 -0400, Art Clemons <n8blk@aolSPAM.com>
wrote:

>I'm waiting to read on here that I've mis-understood a great method of
>measuring HF mobile antennas, but absent a troll or two, I don't expect
>to.

Yeah, that was ugly. I also noticed the author used what appeared to
be a base loaded motorized antenna and then concluded that the
motorized antennas weren't worth a hoot. There are some decent center
loaded ones out there that would have given better results. Base
loaded antennas are probably the worst possible case, based on my
experience. Wonder how that article made it past the editor?

S.T.W.

2725. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 10:50:33 UTC
From: kb9rqz@amsat.org
Message-ID: <gjh3i3pb5gikl6021bqk6k2dab322rqie7@4ax.com>
Source record: 35057
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS
bearsrepeating

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but google

posts from these sorucees are fakes
but till at least terranews is back running well I might use anyserver that comes to hand

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

2726. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 11:14:58 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <ffsi7oehs1@aioe.org>
Source record: 35058

"Roy Lewallen" wrote:
>
>All the power produced by the transmitter arrives at the antenna
> less whatever is lost as heat in the transmission line. There are no waves
> of average power bouncing back and forth on a
> transmission line. Mathematically separating the power moving
> down the line into "forward" and "reverse" components doesn't mean that
> waves of average power actually exist.

Roy, I have been involved with the evaluation and repair of FM and TV broadcast antenna systems where the initial problem was a failure in the antenna, which then produced a high mismatch between it and the main transmission line.

The allegedly non-existent nodes along the transmission line for this condition did a fine job of melting holes in the inner conductor and Teflon insulators of 3-1/8" OD (and larger) rigid transmission line, at 1/2-wavelength intervals over a considerable length of that line.

What other phenomenon do you believe caused such a result?

RF

2727. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 11:37:37 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1193398657.057377.228470@57g2000hsv.googlegroups.com>
Source record: 35059

There
are no waves of average power bouncing back and forth on a
transmission
line.
****
You really mean that Roy, or am I misreading?
I agree that no 'average' value of power is reflecting, but with a
mismatch at the antenna terminals, voltage/current is definitely
sloshing back and forth on the line making standing waves at .25L
intervals that we can physically probe and measure...

denny / k8do

2728. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 11:40:47 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <ffsjo5jov1@aioe.org>
Source record: 35060

"Cecil Moore"
> Approximately a foot and a half of 75m Texas Bugcatcher
> stock will be self-resonant at 4 MHz. That's 90 degrees of
> antenna stuffed into about a foot and a half of coil.

But that self-resonant coil is not the electrical equivalent of a 90-degree linear antenna. A coil by itself is not a very efficient producer of EM radiation, whether self-resonant or not.

RF

2729. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 11:58:47 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1193399927.436417.312540@57g2000hsv.googlegroups.com>
Source record: 35061

On Oct 26, 1:43 am, Sum Ting Wong <sumtingw...@privacy.net> wrote:
> On Thu, 25 Oct 2007 23:02:12 -0400, Art Clemons <n8...@aolSPAM.com>
> wrote:
>
> >I'm waiting to read on here that I've mis-understood a great method of
> >measuring HF mobile antennas, but absent a troll or two, I don't expect
> >to.
>
> Yeah, that was ugly. I also noticed the author used what appeared to
> be a base loaded motorized antenna and then concluded that the
> motorized antennas weren't worth a hoot. There are some decent center
> loaded ones out there that would have given better results. Base
> loaded antennas are probably the worst possible case, based on my
> experience. Wonder how that article made it past the editor?
>
> S.T.W.

Publish or perish?

denny

2730. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 12:15:36 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <ffslpd$pn3$1@aioe.org>
Source record: 35062

Correction: substitute the word "loop" for "node."

RD

2731. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 12:30:18 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1193401818.836599.38770@22g2000hsm.googlegroups.com>
Source record: 35063

BTW, here is the email I sent to QST after reading that article...
****

I know that as a business owner that customers only say something when they are not happy... As your customer I have to say that the QST article comparing various mobile antenna configurations appears to be a bad decision... The methodology is non existant and the information imparted is thin gruel indeed... I can only assume you are having problems finding articles elementary enough to satisfy your target membership of new hams who have rudimentary technical knowledge...

Let me urge you to return with us now to those thrilling days of yesteryear when QST set a technical standard and stimulated the young hams reading it to learn and understand, rather than simply sliding down to our level... Success and leadership is not exclusively defined by circulation numbers - rather it is more defined by the standing and esteem it is held in by the rest of the amateur, technical, and professional community...
****

denny / k8do

2732. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 12:51:06 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <_olUi.13944$lD6.4589@newssvr27.news.prodigy.net>
Source record: 35064

Sum Ting Wong wrote:
> Yeah, that was ugly. I also noticed the author used what appeared to
> be a base loaded motorized antenna and then concluded that the
> motorized antennas weren't worth a hoot. There are some decent center
> loaded ones out there that would have given better results. Base
> loaded antennas are probably the worst possible case, based on my
> experience. Wonder how that article made it past the editor?

I added a top hat and "RV extension" to my HS-1600
that doubled the length of the bottom section. Here's
a picture and the combined results of three CA
shootouts from about 20 years ago. There don't seem to
have been any break-throughs since then.
--
73, Cecil http://www.w5dxp.com

2733. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 12:59:42 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <2xlUi.13945$lD6.6078@newssvr27.news.prodigy.net>
Source record: 35065

Denny wrote:
> There
> are no waves of average power bouncing back and forth on a
> transmission
> line.
> **********
> You really mean that Roy, or am I misreading?
> I agree that no 'average' value of power is reflecting, but with a
> mismatch at the antenna terminals, voltage/current is definitely
> sloshing back and forth on the line making standing waves at .25L
> intervals that we can physically probe and measure...

It depends upon one's definition of "power". A purist
will argue that it is not power until it is dissipated
and steady state reflected power is not dissipated
until power is removed from the source.

The question is: Are the ExB watts associated with a
reflected energy wave defined as "power" or not.
--
73, Cecil http://www.w5dxp.com

2734. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 13:12:21 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <VIlUi.13946$ID6.13283@newssvr27.news.prodigy.net>
Source record: 35066

Richard Fry wrote:
> "Cecil Moore"
>> Approximately a foot and a half of 75m Texas Bugcatcher
>> stock will be self-resonant at 4 MHz. That's 90 degrees of
>> antenna stuffed into about a foot and a half of coil.
>
> But that self-resonant coil is not the electrical equivalent of a
> 90-degree linear antenna. A coil by itself is not a very efficient
> producer of EM radiation, whether self-resonant or not.

I'm not saying anything about radiation efficiency
just commenting on the phase relationship between
the forward wave and reflected wave.

At the first self-resonant frequency, the feedpoint
impedance is purely resistive indicating that the coil
is indeed electrically 90 degrees long.
--
73, Cecil http://www.w5dxp.com

2735. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 13:13:49 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <hKlUi.13947$lD6.6093@newssvr27.news.prodigy.net>
Source record: 35067

Richard Fry wrote:
> Correction: substitute the word "loop" for "node."

"Anti-node" will also work.
--
73, Cecil http://www.w5dxp.com

2736. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 13:16:14 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <yMlUi.13948$ID6.6748@newssvr27.news.prodigy.net>
Source record: 35068

Denny wrote:
> Let me urge you to return with us now to those thrilling days of
> yesteryear when QST set a technical standard and stimulated the young
> hams reading it to learn and understand, rather than simply sliding
> down to our level.

Right on, Denny. Where is Larsen E. Rapp when we
need him? :-)
--
73, Cecil http://www.w5dxp.com

2737. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 13:18:01 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <ffspee$4km$1@aioe.org>
Source record: 35070

"Cecil Moore"
> At the first self-resonant frequency, the feedpoint
> impedance is purely resistive indicating that the coil
> is indeed electrically 90 degrees long.

But that doesn't make the coil an "antenna," as you described it
for that condition.

RF

2738. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 13:18:03 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <fOlUi.3$a01.2@trnddc06>
Source record: 35069

"Richard Fry" <rfry@adams.net> wrote in message
news:ffsi7oehs1@aioe.org...
> "Roy Lewallen" wrote:
>>
>>All the power produced by the transmitter arrives at the antenna
>> less whatever is lost as heat in the transmission line. There are no
>> waves of average power bouncing back and forth on a
>> transmission line. Mathematically separating the power moving
>> down the line into "forward" and "reverse" components doesn't mean that
>> waves of average power actually exist.
> ------------
>
> Roy, I have been involved with the evaluation and repair of FM and TV
> broadcast antenna systems where the initial problem was a failure in the
> antenna, which then produced a high mismatch between it and the main
> transmission line.
>
> The allegedly non-existent nodes along the transmission line for this
> condition did a fine job of melting holes in the inner conductor and
> Teflon insulators of 3-1/8" OD (and larger) rigid transmission line, at
> 1/2-wavelength intervals over a considerable length of that line.
>
> What other phenomenon do you believe caused such a result?
>
> RF

Hi Richard

I recognize that you address your question to Roy, so forgive me for
breaking in.
It seems clear that the power is generated at the "source" and disipated
at the "load" and that between the source and the load, only disipative
components will exist.
I would ask "what component along the transmission line between the source
and load can *inrease* power?".

As for the melting of condutors at 1/2 wave intervals, I attribute that to
high current density related to a low impedance at that point. The damage
may actually be related to the high impedance on the line which caused the
voltage to rise too high.

Jerry

2739. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 13:22:56 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <Py7EVyVwoeIHFA1I@ifwtech.co.uk>
Source record: 35071

Denny wrote:
>There
>are no waves of average power bouncing back and forth on a
>transmission
>line.
>**********
>You really mean that Roy, or am I misreading?
>I agree that no 'average' value of power is reflecting, but with a
>mismatch at the antenna terminals, voltage/current is definitely
>sloshing back and forth on the line making standing waves at .25L
>intervals that we can physically probe and measure...

Waves of voltage, yes [1].

Waves of current, yes [1].

Waves of average power, no.

History repeats itself in this discussion, so someone is sure to come up with that snappy line about: "Feel the dummy load on the reflected power port of a broadcast TX! If there's no such thing as reflected power, how come that load gets hot?"

That's sloppy thinking. You are not looking directly at the main transmission line - you're looking at the output of a directional coupler that has been <inserted into> that line. Without the coupler, there's nowhere to connect that load.

That coupler is a transducer. It samples signals from the main line, and then it does things to them.

A directional coupler does NOT sample waves of power from the main line. It samples the voltage and current on the main line, adds the reflected components in phase, and delivers them to the output port labeled 'Reflected'. Connect a dummy load there, and sure enough it will get hot... but that's only through the action of the coupler.

The challenge is still on the mat from several previous rounds: can anyone provide a fully detailed description of the operation of a directional coupler, circulator or similar device, based ONLY on waves of forward and reflected power? It can be done easily using forward and reflected waves of voltage and/or current, but that approach is off-limits for this challenge. Believers in waves of power shouldn't need it.

[1] Real hams can blow their own holes in the side of the coax - we don't need no broadcast TX :-)

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2740. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 14:20:57 UTC
From: nm5k@wt.net
Message-ID: <1193408457.917079.109440@v3g2000hsg.googlegroups.com>
Source record: 35072

On Oct 25, 10:02 pm, Art Clemons <n8...@aolSPAM.com> wrote:
> I almost could not believe that an article that starts out with using an
> antenna tuner to deliver all possible power to mobile HF antennas got
> published.

I know quite a few people that want to try that set up. Without fail,
I warn against it. Some listen, some don't.. But that's ok, sometimes
failure is the best teacher...
Whats really bad is the few die hards that run those and think they
are world beaters. One will tell my friends they are the greatest
thing
since sliced bread, and then I'll have to tell em, no no no...
After a while they don't know who to believe...
So I often have to let them learn the hard way.
I assume the "die hards" don't try anything else to compare with..
I haven't read the article, as I don't QST, but if they recommended
that thing as a good performing antenna, they should be flogged.
MK

2741. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 14:24:31 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <zMmUi.37024$eY.36406@newssvr13.news.prodigy.net>
Source record: 35073

Richard Fry wrote:
> "Cecil Moore"
>> At the first self-resonant frequency, the feedpoint
>> impedance is purely resistive indicating that the coil
>> is indeed electrically 90 degrees long.
>
> But that doesn't make the coil an "antenna," as you described it
> for that condition.

We know that helical antennas exist and radiate. The
form factor of a self-resonant 75m bugcatcher coil is
helical and will radiate (even though very inefficiently)
and contacts are more than likely possible. What is your
definition of "antenna"? A self-resonant 75m bugcatcher
coil is not all that different from an Isotron "antenna".
--
73, Cecil http://www.w5dxp.com

2742. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 14:35:58 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <hXmUi.1735$Vx3.889@nlpi069.nbdc.sbc.com>
Source record: 35074

Jerry Martes wrote:
> As for the melting of condutors at 1/2 wave intervals, I attribute that to
> high current density related to a low impedance at that point.

Because that impedance is virtual, it is a *result*
and not a *cause*. The *cause* of the melting is the
in-phase addition of the forward current and reflected
current whose phasor sum is a maximum at points 1/2 WL
apart. Denying that reflected energy exists will not
keep the wire from melting.

The low virtual impedance mentioned above is the
result of:

Z = (Vfor+Vref)/(Ifor+Iref)

at the points where the two voltages are out of phase
and the two currents are in phase.
--
73, Cecil http://www.w5dxp.com

2743. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 15:02:43 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <ffsvip$n36$1@aioe.org>
Source record: 35075

"Cecil Moore"
> We know that helical antennas exist and radiate. The
> form factor of a self-resonant 75m bugcatcher coil is
> helical and will radiate (even though very inefficiently)
> and contacts are more than likely possible.
> What is your definition of "antenna"?

The sole purpose of a helical (or any other) antenna is to radiate and/or receive EM waves with pattern, polarization and other characteristics suitable for the application.

A bugcatcher coil is not designed to be an antenna, and radiates only incidentally.

RF

2744. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 15:06:31 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <XnnUi.48464$RX.7559@newssvr11.news.prodigy.net>
Source record: 35076

Ian White GM3SEK wrote:
> Waves of voltage, yes [1].

Voltage is proportional to the E-field.

> Waves of current, yes [1].

Current is proportional to the H-field

> Waves of average power, no.

ExH = joules/sec = watts. Are watts the the dimensions
of power? Are the E-field and H-field usually given in
RMS (average) values? Can ExH be considered as the
average power in an EM wave? Are you arguing that
watts are not necessarily power? Are you arguing
that it is not power until it is dissipated?

> It can be done easily using forward and
> reflected waves of voltage and/or current, but that approach is
> off-limits for this challenge. Believers in waves of power shouldn't
> need it.

"Waves of power" is just a semantic strawman designed
to elicit an emotional response. Anyone using the term
loses technical credibility. It is akin to using the
'N' word to describe race.

How about believers of EM waves containing energy passing
a point? e.g. joules/sec = watts measured at a point?

All this is explained in joules/sec = watts without referring
to volts or amps in my energy analysis article at:

http://www.w5dxp.com/energy.htm

Note that I do not mention "waves of power" anywhere in
my article. What I do talk about is forward energy waves
and reflected energy waves the average value of which can
be measured at a point in joules/sec, i.e. watts.
--
73, Cecil http://www.w5dxp.com

2745. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 15:14:59 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <TvnUi.48467$RX.36998@newssvr11.news.prodigy.net>
Source record: 35077

Richard Fry wrote:
> A bugcatcher coil is not designed to be an antenna, and radiates only
> incidentally.

Maybe you missed what I am saying. Take a 75m bugcatcher
coil and add turns to it until it is self-resonant at
4 MHz. You will have a very inefficient helical antenna.
Radiation from such a helical antenna would be purposeful,
not incidental. Heck, 75m hamsticks are less than 1%
efficient and they still call them "antennas".
--
73, Cecil http://www.w5dxp.com

2746. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 16:11:11 UTC
From: richardharrison@webtv.net
Message-ID: <5069-4722119F-327@storefull-3256.bay.webtv.net>
Source record: 35078

Art Clemons wrote:
"I don`t expect too."

Why all the Andy Rooney crap here?

No problem with a tuner. "The input power was the same on each antenna."

No problem with 360 feet. Received carrier power is proportional to
radiated power at that distance along the horiaontal path.

Best regards, Richard Harrison, KB5WZI

2747. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 16:28:14 UTC
From: Spam Trap <bit-bucket@config.com>
Message-ID: <slrnfi45cu.2h20.bit-bucket@shell.config.com>
Source record: 35079

On Fri, 26 Oct 2007 13:16:14 GMT, Cecil Moore wrote:
> Denny wrote:
>> Let me urge you to return with us now to those thrilling days of
>> yesteryear when QST set a technical standard and stimulated the young
>> hams reading it to learn and understand, rather than simply sliding
>> down to our level.
>
> Right on, Denny. Where is Larsen E. Rapp when we need him? :-)

Maybe QST has hired Hashafisti Scratchi away from CQ?

2748. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 16:28:19 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <z$$bW7djWhIHFACX@ifwtech.co.uk>
Source record: 35080

Cecil Moore wrote:
>Ian White GM3SEK wrote:
>> Waves of voltage, yes [1].
>
>Voltage is proportional to the E-field.
>
>> Waves of current, yes [1].
>
>Current is proportional to the H-field
>
>> Waves of average power, no.
>
>ExH = joules/sec = watts. Are watts the the dimensions
>of power? Are the E-field and H-field usually given in
>RMS (average) values? Can ExH be considered as the
>average power in an EM wave? Are you arguing that
>watts are not necessarily power? Are you arguing
>that it is not power until it is dissipated?
>
>> It can be done easily using forward and reflected waves of voltage
>>and/or current, but that approach is off-limits for this challenge.
>>Believers in waves of power shouldn't need it.
>
>"Waves of power" is just a semantic strawman designed
>to elicit an emotional response. Anyone using the term
>loses technical credibility. It is akin to using the
>'N' word to describe race.
>
>How about believers of EM waves containing energy passing
>a point? e.g. joules/sec = watts measured at a point?
>
>All this is explained in joules/sec = watts without referring
>to volts or amps in my energy analysis article at:
>
>http://www.w5dxp.com/energy.htm
>
>Note that I do not mention "waves of power" anywhere in
>my article. What I do talk about is forward energy waves
>and reflected energy waves the average value of which can
>be measured at a point in joules/sec, i.e. watts.

Cut the other person's text, pepper with strawman questions, throw in a
very ugly smear, and dodge the challenge. Same old Cecil.

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2749. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 16:36:08 UTC
From: Jerry <joxendi@bellsouth.net>
Message-ID: <XHoUi.7209$8G5.3516@bignews4.bellsouth.net>
Source record: 35081

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:_olUi.13944$lD6.4589@newssvr27.news.prodigy.net...
> Sum Ting Wong wrote:
>> Yeah, that was ugly. I also noticed the author used what appeared to
>> be a base loaded motorized antenna and then concluded that the
>> motorized antennas weren't worth a hoot. There are some decent center
>> loaded ones out there that would have given better results. Base
>> loaded antennas are probably the worst possible case, based on my
>> experience. Wonder how that article made it past the editor?
>
> I added a top hat and "RV extension" to my HS-1600
> that doubled the length of the bottom section. Here's
> a picture and the combined results of three CA
> shootouts from about 20 years ago. There don't seem to
> have been any break-throughs since then.
> --
> 73, Cecil http://www.w5dxp.com

Cecil,

I haven't read the article, but if the guy is claiming that his "tuner'
thing is better than a center-loaded bugcatcher or reasonable sized
screwdriver (FULL sized), I would LOVE to get in on any wagers he is
prepared to entertain! (Snickers and unintentional "razzberries" beginning a
crescendo and bursting into loud, uncontrollable guffaws and knee slaps!)

You mean they actually allow people like THAT to WRITE that s--- in
magazines?

73

Jerry
K4KWH

2750. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 16:41:11 UTC
From: richardharrison@webtv.net
Message-ID: <5069-472218A7-332@storefull-3256.bay.webtv.net>
Source record: 35082

Stefan Wolfe wrote:
"The best earth ground is obtained by creating 180 1/4 wavelength
radials from the base of the vertical element".

Adequate but likely overkill. This was all settled in 1937 by RCA`s
Brown, Lewis, and Epstein. See Fig. 2.19 on page 120 of Ed Laport`s
"Radio Antenna Engineering".

Best regards, Richard Harrison, KB5WZI

2751. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 17:10:32 UTC
From: Bruce in Alaska <fast@btpost.net>
Message-ID: <fast-7AFB92.09125026102007@netnews.worldnet.att.net>
Source record: 35083

In article <47214641$0$32481$4c368faf@roadrunner.com>,
"Stefan Wolfe" <stefan@eml.com> wrote:

> I always thought that the grid grounds and
> radials were a waste of time. What can make a better ground than earth
> itself?

What you have learned is that "Ground is NOT Ground, the World Around"
an Old Radiomans adage from an earlier generation. Power Distribution
Ground is not the same as RF Ground, and mostly the two are Mutually
Exclusive.

You ask what makes a better "RF" Ground than earth itself? That is
very simple. Ocean SaltWater makes a much better RF Ground, than
anything you have, or can build, on earth.

Bruce in alaska an Old Radioman from the previous generation....
--
add <path> before @

2752. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 17:20:16 UTC
From: Nick <a@b.com>
Message-ID: <klpUi.2954$Eq.698@newsfe3-gui.ntli.net>
Source record: 35084

Didn't SGC have a version of a tuner that sort of clamped on an outside car window and had an 8 foot vertical rising from it ?

Did anyone here ever use one and what were the results ?

Nick

(in UK - don't see QST)

2753. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 17:42:57 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <BGpUi.541$yV6.350@newssvr25.news.prodigy.net>
Source record: 35085

Ian White GM3SEK wrote:
> Cut the other person's text, pepper with strawman questions, throw in a
> very ugly smear, and dodge the challenge. Same old Cecil.

Why must you resort to an ad hominem attack
instead of a point by point technical discussion?
What are you afraid might be revealed by such a
technical discussion?

You know and I know that if we polled the readers
of this newsgroup, no one believes in "waves of
average power". Why you guys feel the need to crucify
that old strawman yet one more time just indicates
how devoid your arguments are of any valid technical
content related to reality. Since it allows you guys
to avoid the actual technical issues, the purpose is
obvious: "Since we are such gurus, blindly believe
what we say."

Here are questions for you and the newsgroup:

1. Who believes in "waves of average power"?
Please don't be shy.

2. Who believes that reflected waves do not
exist?

3. If reflected waves exist, who believes they
can actually exist if they are devoid of joules/sec,
i.e. ExH = zero?
--
73, Cecil http://www.w5dxp.com

2754. "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 17:47:22 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <KKpUi.542$yV6.341@newssvr25.news.prodigy.net>
Source record: 35086

```
This thread is started to allow anyone who believes
in "waves of average power" to say so and explain
why they believe such.
--
73, Cecil http://www.w5dxp.com
```

2755. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 18:14:30 UTC
From: richardharrison@webtv.net
Message-ID: <12032-47222E86-278@storefull-3252.bay.webtv.net>
Source record: 35088

Cecil, W5DXP wrote:
"Waves of power is just a semantic strawman designed to elicit an emotional response."

It worked. I like the word power. Ronald W.P. King uses it in "Transmission Lines, Antennas and Wave Guides" on page 245 for example:
"Important properties of transmission circuits (wave guides) of all types include the following:
1. Low power loss (a) due to heating the conductors and dielectrics of the circuit itself, and (b) due to radiation.
2. Sufficient power capacity. This implies sufficient spacing of conductors and adequate dielectric strength of insulating media to prevent spark discharge; it presupposes conductors with enough surface to carry large high-frequency currents.
3. An adequate frequency range and a useful frequency response.
4. Physical availability.
5. Special features such as rotational symmetry for swivel points, invariance in polarization of flexible construction."

Best regards, Richard Harrison, KB5WZI

2756. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 18:20:34 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fftb5i$14l2$1@f04n12.cac.psu.edu>
Source record: 35087

nm5k@wt.net wrote:
> On Oct 25, 10:02 pm, Art Clemons <n8...@aolSPAM.com> wrote:
>> I almost could not believe that an article that starts out with using an
>> antenna tuner to deliver all possible power to mobile HF antennas got
>> published.
>
> I know quite a few people that want to try that set up. Without fail,
> I warn against it. Some listen, some don't.. But that's ok, sometimes
> failure is the best teacher...

I've considered putting a tuner on my Bugcatcher for 80 meters, but
haven't. The thing is so narrow there that the alternative is two taps
for the phone portion of the band.

> Whats really bad is the few die hards that run those and think they
> are world beaters. One will tell my friends they are the greatest
> thing
> since sliced bread, and then I'll have to tell em, no no no...
> After a while they don't know who to believe...
> So I often have to let them learn the hard way.

sometimes that is what it takes!

> I assume the "die hards" don't try anything else to compare with..
> I haven't read the article, as I don't QST, but if they recommended
> that thing as a good performing antenna, they should be flogged.

I was surprised that they didn't include Bugcatchers in the test.
Perhaps they consider every center loaded mobile antenna identical?
Maybe they just tested the "pretty" antennas?

- 73 de Mike KB3EIA -

2757. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 18:33:34 UTC
From: richardharrison@webtv.net
Message-ID: <12032-472232FE-281@storefull-3252.bay.webtv.net>
Source record: 35089

Bruce in Alaska wrote:
"Power Distribution Ground is not the same as RF Ground and mostly the two are Mutually Exclusive.

Mostly Bruce is right. But, I`ve worked in many broadcast plants and can assure you that the radial grounding system is more than adequate as a power distribution ground except for code compliance which may require a ground rod and/or connection to a metallic water pipe. The radials are the best RF ground.

Best regards, Richard Harrison, KB5WZI

2758. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 19:00:17 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <4PqUi.591$%Y6.388@nlpi061.nbdc.sbc.com>
Source record: 35090

Richard Harrison wrote:
> Cecil, W5DXP wrote:
> "Waves of power is just a semantic strawman designed to elicit an
> emotional response."
>
> It worked. I like the word power.

Richard, what would be the dimensions of flowing power?
Wouldn't power flowing past a point be watts/sec or
joules/sec/sec? Have you ever heard of such?

Wave energy flows. The power in the wave is measured at
a fixed point, i.e. the measurement point is NOT moving.

A Bird wattmeter is indirectly measuring the power in joules/sec
at a fixed point on the transmission line. The joules are flowing
past a fixed point but the joules/sec power exists at the
measurement point which is NOT moving.

Reflected energy is the energy flowing in the reflected wave.
Reflected power is a measure of that energy flowing past a
fixed point, i.e. the power itself is NOT moving.

"Waves of Average Power" is an oxymoron since waves move
and power doesn't. Be aware that "Waves of Average Power"
is an expression designed to sucker the unsuspected into
a losing argument.
--
73, Cecil http://www.w5dxp.com

2759. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 19:28:53 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13i4fvo5b2nml33@corp.supernews.com>
Source record: 34991

Richard Fry wrote:
> "Roy Lewallen" wrote:
>>
>> All the power produced by the transmitter arrives at the antenna
>> less whatever is lost as heat in the transmission line. There are no
>> waves of average power bouncing back and forth on a
>> transmission line. Mathematically separating the power moving
>> down the line into "forward" and "reverse" components doesn't mean
>> that waves of average power actually exist.
> ------------
>
> Roy, I have been involved with the evaluation and repair of FM and TV
> broadcast antenna systems where the initial problem was a failure in the
> antenna, which then produced a high mismatch between it and the main
> transmission line.
>
> The allegedly non-existent nodes along the transmission line for this
> condition did a fine job of melting holes in the inner conductor and
> Teflon insulators of 3-1/8" OD (and larger) rigid transmission line, at
> 1/2-wavelength intervals over a considerable length of that line.
>
> What other phenomenon do you believe caused such a result?

Let's suppose for a moment that the holes were melted by reflecting waves of average power. Why do they repeat every half wavelength? Do the waves of average power have a phase angle such that they reinforce periodically? As an engineer, you of course know that the average of a periodic function is the integral of that function taken over one period, divided by the period. How then can average power have a phase angle? Or do the waves not have a phase angle but rather change amplitude as they travel? If so, what is the mechanism by which they do? Can you write the equations showing the power at each point along the line and how it can be greater at half wavelength intervals?

In contrast, the existence of traveling and standing waves of voltage and current have long been established. You can find a rigorous analysis of their behavior in a vast number of textbooks. Given the load and transmission line impedances, you can very quickly calculate, even by hand and without the use of a computer, the current and voltage at any point along the line. Unless the line is perfectly matched, there will be repeating points of high current and of high voltage. Depending on the nature of the conductor and insulator, either or both of these can cause localized heating. In the example you gave, the damage is almost certainly caused by high current rather than high voltage. If you'll provide me with the impedance of the load and the impedance and velocity

factor of the cable, I'll show that the high current points fall at the points where the damage occurred. If you tell me the transmitter power output, I'll also tell you what the current was at those points. Can you do the same for your theory of power nodes resulting from bouncing waves of average power? Anyone else having a basic understanding of transmission line operation can explain your cable damage without any necessity to imagine bouncing waves of average power.

If you insist on believing that the damage was caused by traveling waves of average power, please provide an explanation of how these waves interact to create more power at some points than others. Because power is the rate of transfer or dissipation of energy, the power into any point has to equal the sum of the power dissipated at that point and the power leaving that point, unless that point contains some mechanism to store energy. Your analysis has to be consistent with this in order to avoid violating the law of conservation of energy.

I can provide a detailed mathematical quantitative analysis of the nature of traveling voltage and current waves which explain the phenomenon you cite. I'm looking forward to your corresponding mathematical explanation of the phenomenon using traveling average power waves.

Roy Lewallen, W7EL

2760. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 19:30:10 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13i4g24nqqe0u71@corp.supernews.com>
Source record: 34992

Denny wrote:
> There
> are no waves of average power bouncing back and forth on a
> transmission
> line.
> **********
> You really mean that Roy, or am I misreading?

Yes, I mean exactly what I said.

> I agree that no 'average' value of power is reflecting, but with a
> mismatch at the antenna terminals, voltage/current is definitely
> sloshing back and forth on the line making standing waves at .25L
> intervals that we can physically probe and measure...

Then we agree on both points.

Roy Lewallen, W7EL

2761. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 19:36:43 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <flrUi.25196$kj1.11416@bgtnsc04-news.ops.worldnet.att.net>
Source record: 34993

Cecil Moore wrote:
>

>
> Here are questions for you and the newsgroup:
>
> 1. Who believes in "waves of average power"?
> Please don't be shy.
>
> 2. Who believes that reflected waves do not
> exist?
>
> 3. If reflected waves exist, who believes they
> can actually exist if they are devoid of joules/sec,
> i.e. ExH = zero?

Cecil,

If you ever come to the realization that there is a difference between transient conditions and steady-state conditions, along with the realization that standing waves are actually useful, then all of this mumbo-jumbo about energy coursing back and forth along the entire transmission line would disappear.

No waves of power needed, average or not.

:D

73,
Gene
W4SZ

2762. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 20:09:27 UTC
From: richardharrison@webtv.net
Message-ID: <18885-47224977-524@storefull-3257.bay.webtv.net>
Source record: 34995

Cecil, W5DXP wrote:
"Waves of Average Power is an oxymoron since waves move and power doesn`t."

OK, I`m a sucker. I apply power to one end of a transmission line and power results at the opposite end of the line.

Power did not exist at the far end of the line until it was transported there by the line. The line moved the power from the 1st place to the 2nd place. It moved!

Best regards, Richard Harrison, KB5WZI

2763. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 20:12:21 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13i4ih8olso4n03@corp.supernews.com>
Source record: 34994

QST editors can't be expected to be experts on all the topics they have to deal with. Over the years, they've dealt with the problem in various ways. One was to establish a pool of "Technical Advisors" -- volunteers who had particular expertise in various areas. Some manuscripts being considered for publication were sent to the appropriate TAs for comments and review. This practice slowly died out, but I don't know why. I suspect it was because the editors seldom had the time for this step in the process due to erratic scheduling.

Eventually, they adopted a solution which was easy on the editors and their schedules: post the proposed articles to a restricted web site where the TAs could review them and leave comments. This saved the time of communicating with individual TAs, and made it unnecessary to wait for a response -- if comments weren't there by the deadline, too bad. What I saw as one problem with this approach was that comments and analyses were regularly being made by TAs whose appointments had nothing at all to do with the subject matter. As an example (not representing any actual particular occurrence), a TA whose expertise was, say, legal matters or publicity would review (for technical content) an article on phased arrays. As far as I could tell, their reviews were weighted equally to those from people who really understood the topic. In any case, the one or few reviews from knowledgeable people were generally lost in the noise. I don't know if this is the method still being used -- I resigned my TA appointment several years ago when it became apparent that I was no longer able to make any substantial contribution. I know of at least a couple of very knowledgeable people who have done likewise. This is a shame, because they're perfectly willing to provide free technical assistance, yet the ARRL doesn't seem able to find a way to take advantage of it.

I'm not sure they've ever solved the problem of editors who don't understand the material modifying it in such a way as to make it no longer true. In all cases but one when this happened to me, I was able to correct the problems before publication. In one case, however, I wasn't given enough time to correct the numerous misinterpretations, invalid "explanations", and other seriously wrong modifications made by the editor and had to pull the article(*). Several extremely capable people I know, however, have had serious errors introduced to their articles by the editor *after their final review*, so they didn't even get to see the errors until the article was published under their name. Most of these people will never write for QST again as a result. This is one of the reasons that QST has a smaller pool of knowledgeable and capable authors to draw from.

So when you see a technically weak article in QST, the author might not be entirely at fault.

(*) I want to make it clear that I'm very aware that my writing and communicating skills aren't all that great, and I really appreciate having an editor improve the style, clarity, and brevity of my writing, as well as questioning any weak or inconsistent arguments I've made. [A good editor would have cut half the words from the preceding sentence, and made it a lot clearer at the same time.] So I welcome editing. What I do object to is editing which changes the core meaning of the content and/or results in its being technically incorrect.

Roy Lewallen, W7EL

2764. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 20:34:28 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193430868.771172.206380@o3g2000hsb.googlegroups.com>
Source record: 34996

On 26 Oct, 13:12, Roy Lewallen <w...@eznec.com> wrote:
> QST editors can't be expected to be experts on all the topics they have
> to deal with. Over the years, they've dealt with the problem in various
> ways. One was to establish a pool of "Technical Advisors" -- volunteers
> who had particular expertise in various areas. Some manuscripts being
> considered for publication were sent to the appropriate TAs for comments
> and review. This practice slowly died out, but I don't know why. I
> suspect it was because the editors seldom had the time for this step in
> the process due to erratic scheduling.
>
> Eventually, they adopted a solution which was easy on the editors and
> their schedules: post the proposed articles to a restricted web site
> where the TAs could review them and leave comments. This saved the time
> of communicating with individual TAs, and made it unnecessary to wait
> for a response -- if comments weren't there by the deadline, too bad.
> What I saw as one problem with this approach was that comments and
> analyses were regularly being made by TAs whose appointments had nothing
> at all to do with the subject matter. As an example (not representing
> any actual particular occurrence), a TA whose expertise was, say, legal
> matters or publicity would review (for technical content) an article on
> phased arrays. As far as I could tell, their reviews were weighted
> equally to those from people who really understood the topic. In any
> case, the one or few reviews from knowledgeable people were generally
> lost in the noise. I don't know if this is the method still being used
> -- I resigned my TA appointment several years ago when it became
> apparent that I was no longer able to make any substantial contribution.
> I know of at least a couple of very knowledgeable people who have done
> likewise. This is a shame, because they're perfectly willing to provide
> free technical assistance, yet the ARRL doesn't seem able to find a way
> to take advantage of it.
>
> I'm not sure they've ever solved the problem of editors who don't
> understand the material modifying it in such a way as to make it no
> longer true. In all cases but one when this happened to me, I was able
> to correct the problems before publication. In one case, however, I
> wasn't given enough time to correct the numerous misinterpretations,
> invalid "explanations", and other seriously wrong modifications made by
> the editor and had to pull the article(*). Several extremely capable
> people I know, however, have had serious errors introduced to their
> articles by the editor *after their final review*, so they didn't even
> get to see the errors until the article was published under their name.
> Most of these people will never write for QST again as a result. This is
> one of the reasons that QST has a smaller pool of knowledgeable and
> capable authors to draw from.

>
> So when you see a technically weak article in QST, the author might not
> be entirely at fault.
>
> (*) I want to make it clear that I'm very aware that my writing and
> communicating skills aren't all that great, and I really appreciate
> having an editor improve the style, clarity, and brevity of my writing,
> as well as questioning any weak or inconsistent arguments I've made. [A
> good editor would have cut half the words from the preceding sentence,
> and made it a lot clearer at the same time.] So I welcome editing. What
> I do object to is editing which changes the core meaning of the content
> and/or results in its being technically incorrect.
>
> Roy Lewallen, W7EL

But "experts" are usually diehards and unwilling to
accept, analyse, or review change.
Can you imagine some of the "experts" on this group
having a hand at what should be printed and what was hogwash?
Maybe it is time to govern science by the polls.
Art

2765. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 20:36:20 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <9dsUi.905$nN3.134@newssvr17.news.prodigy.net>
Source record: 34997

Roy Lewallen wrote:
> In contrast, the existence of traveling and standing waves of voltage
> and current have long been established.

How can those waves exist without energy? In particular,
how can those waves exist without their energy components
passing a point and being measured in joules/sec?

> I can provide a detailed mathematical quantitative analysis of the
> nature of traveling voltage and current waves which explain the
> phenomenon you cite.

What happens when you calculate ExH in watts? Is it zero?
If not, your whole argument falls apart.
--
73, Cecil http://www.w5dxp.com

2766. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 20:39:42 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <hgsUi.906$nN3.731@newssvr17.news.prodigy.net>
Source record: 34998

Gene Fuller wrote:
> If you ever come to the realization that there is a difference between
> transient conditions and steady-state conditions, along with the
> realization that standing waves are actually useful, ...

Please explain how those waves can exist without energy,
i.e. without joules/sec passing a point.

> No waves of power needed, average or not.

Please stop doing that, Gene. You know that I don't believe
in "power waves". What you are trying to deny is that EM
waves contain energy that can be measured at a point in
joules/sec = watts. That argument just won't fly.
--
73, Cecil http://www.w5dxp.com

2767. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 20:44:23 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <HksUi.12433$4V6.2723@newssvr14.news.prodigy.net>
Source record: 34999

Richard Harrison wrote:
> Power did not exist at the far end of the line until it was transported
> there by the line. The line moved the power from the 1st place to the
> 2nd place. It moved!

Here's a physical analogy. We light a butane lighter at one
point and observe the flame. We close the lighter and move
to another point 100 yards away. We light the lighter again
and observe the flame. Did me move the flame by 100 yards?
Or did we convert energy into power at one point, then
move the energy source to another point and convert the
energy into power?

If you move watts of power then you should be able to
measure that movement in watts/sec or joules/sec/sec.
Have you ever measured such?
--
73, Cecil http://www.w5dxp.com

2768. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 21:24:10 UTC
From: richardharrison@webtv.net
Message-ID: <7584-47225AFA-49@storefull-3258.bay.webtv.net>
Source record: 35000

Cecil, W5DXP wrote:
"Have you ever measured such?"

My Bird Model 43 Instruction book says:
"---designed to measure power flow and load match in 50 ohm coaxial transmission lines."
I`ve used it many times.

Best regards, Richard Harrison, KB5WZI

2769. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 22:18:52 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <gJtUi.280863$ax1.186633@bgtnsc05-news.ops.worldnet.att.net>
Source record: 35001

Cecil Moore wrote:
> Gene Fuller wrote:
>> If you ever come to the realization that there is a difference between
>> transient conditions and steady-state conditions, along with the
>> realization that standing waves are actually useful, ...
>
> Please explain how those waves can exist without energy,
> i.e. without joules/sec passing a point.
>
>> No waves of power needed, average or not.
>
> Please stop doing that, Gene. You know that I don't believe
> in "power waves". What you are trying to deny is that EM
> waves contain energy that can be measured at a point in
> joules/sec = watts. That argument just won't fly.

Cecil,

I did not say anything that denied that EM waves contain energy.

Where this entire controversy always gets hung up is the difference between the traveling wave model where the waves go back and forth over the entire length of the transmission line, and the standing wave model. In the traveling wave model it is necessary for the wave energy to traverse back and forth along the entire line. This leads to the condition where energy is flowing in both directions at the same time at any given point in the line. In the standing wave model the energy simply sloshes back and forth within a single half-wave loop. No energy collisions; no problems at all.

As I have said many times, these are mathematical representations, not physical "reality". Neither is more correct than the other. No physical measurement can tell the difference. But it is often useful to use the most convenient model that does not carry unwanted artifacts and other baggage.

Oh, by the way, it is not possible to measure energy at a point. Energy has an extrinsic, not intrinsic, character. It would be educational to read any good physics text to understand what energy really means and how conservation of energy laws are constructed.

73,
Gene
W4SZ

2770. get kelp

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 22:29:08 UTC
From: konstans@hotmail.com
Message-ID: <9hq4i3l58d6q28s5gemvq4uj9b87pvtvvv@4ax.com>
Source record: 35002
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.amateur.equipment

On Fri, 26 Oct 2007 16:19:32 -0400, "an_old_friend"
<kornstains@hotmail.com> wrote:

>
the same old tired graphics

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but google

posts from these sorucees are fakes
but till at least terranews is back running well I might use anyserver that comes to hand

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

2771. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 22:41:09 UTC
From: Art Clemons <n8blk@aolSPAM.com>
Message-ID: <1dGdnf_P-dmY8L_anZ2dnUVZ_jKdnZ2d@comcast.com>
Source record: 35003

Jerry wrote:

> I haven't read the article, but if the guy is claiming that his "tuner'
> thing is ï¿½better than a center-loaded bugcatcher or reasonable sized
> screwdriver (FULL sized), I would LOVE to get in on any wagers he is
> prepared to entertain! (Snickers and unintentional "razzberries" beginning
> a crescendo and bursting into loud, uncontrollable guffaws and knee
> slaps!)
>

No, it wasn't quite that bad. The author though seems to have used a tuner to match to the antennas being tested and then coming to some conclusion about how well said antenna radiated energy to a relatively nearby field strength meter (360 feet). One basic problem is that you then end up with some signal level which may or may not be equal to the original output from the rig (apparently an ICOM 706-MKIIG) reaching the antenna. That might make the rig happy but it does leave the antenna with an awfully funny feed at times, one that could be oh 3 dB or so down from what the rig puts out.

2772. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 22:53:12 UTC
From: Art Clemons <n8blk@aolSPAM.com>
Message-ID: <zMWdndRvpoRE8r_anZ2dnUVZ_vfinZ2d@comcast.com>
Source record: 35004

Richard Harrison wrote:

> No problem with a tuner. "The input power was the same on each antenna."

How can the input power be the same if it's going through the tuner? The input power is the same at the input of the tuner, but we have absolutely no idea what the output power from the tuner is. Isn't that a problem for a fair test? Would not a more reasonable approach be to use something like Wattmeter and get the antenna resonant? I've seen folks who used antenna tuners find out the tuner can get really hot into some loads? If the tuner is consuming some of the RF as heat, that's power not reaching the antenna ergo not a fair test.

> No problem with 360 feet. Received carrier power is proportional to
> radiated power at that distance along the horiaontal path.
>

Isn't 360 feet within the near RF field at most HF frequencies?

2773. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 23:13:32 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fftsbd$a1s$1@aioe.org>
Source record: 35005

"Roy Lewallen" wrote:
>>> All the power produced by the transmitter arrives at the antenna
>>> less whatever is lost as heat in the transmission line.

Roy,

If a transmitter produces r-f power, and a load connected to that transmitter via a transmission line dissipates any of that r-f power, then would you not agree that such an r-f transmission line conducts at least whatever r-f power is dissipated by that load?

And if such a transmission line can conduct power in one direction (incident), it can also conduct power equally well in the opposite direction (reflected), until the net result of incident + reflected causes line failure.

When the Zo of a transmission line matches the Zo of a load at its far end, then that far-end Z absorbs nearly 100% of the power delivered there by that transmission line.

If those impedances are not matched, a reflection is generated that may lead to the real-world, destructive and periodic effects on the transmission line that I reported from personal experience, earlier in this thread.

RF

2774. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 23:41:39 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <47227b35$0$25641$4c368faf@roadrunner.com>
Source record: 35006

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:12032-472232FE-281@storefull-3252.bay.webtv.net...
> Bruce in Alaska wrote:
> "Power Distribution Ground is not the same as RF Ground and mostly the
> two are Mutually Exclusive.
>
> Mostly Bruce is right. But, I`ve worked in many broadcast plants and can
> assure you that the radial grounding system is more than adequate as a
> power distribution ground except for code compliance which may require a
> ground rod and/or connection to a metallic water pipe. The radials are
> the best RF ground.
>
> Best regards, Richard Harrison, KB5WZI

I agree that radials certainly make a food RF counterpoise.

2775. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 23:43:18 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13i4usor5u1v20a@corp.supernews.com>
Source record: 35007

Richard Fry wrote:
> "Roy Lewallen" wrote:
>>>> All the power produced by the transmitter arrives at the antenna
>>>> less whatever is lost as heat in the transmission line.
> _________
>
> Roy,
>
> If a transmitter produces r-f power, and a load connected to that
> transmitter via a transmission line dissipates any of that r-f power, then
> would you not agree that such an r-f transmission line conducts at least
> whatever r-f power is dissipated by that load?

Of course.

> And if such a transmission line can conduct power in one direction
> (incident), it can also conduct power equally well in the opposite direction
> (reflected), until the net result of incident + reflected causes line
> failure.

No.

> When the Zo of a transmission line matches the Zo of a load at its far end,
> then that far-end Z absorbs nearly 100% of the power delivered there by that
> transmission line.

This occurs whether or not there's an impedance match. If I connect my transmitter to a 50 ohm dummy load via a half wavelength 300 ohm line, all the transmitter's power (less the line loss) is conveyed via the transmission line to the load. This is in spite of a 6:1 mismatch at the load.

> If those impedances are not matched, a reflection is generated that may lead
> to the real-world, destructive and periodic effects on the transmission line
> that I reported from personal experience, earlier in this thread.

In my example, as at any time the load and line aren't matched, there will be standing waves of voltage and current on the line, which can lead to line failure. In the example you gave, it was almost certainly the high current points which caused it. If you'll pick up any transmission line text, you'll be able to quickly see exactly what happened.

You still haven't explained how these imagined power waves cause periodic effects. Please re-read my last posting -- is it some kind of phase angle associated with the power waves, or is there some mechanism by which they vary with position along the line? I'm looking forward to your mathematical description of what you think is happening. You can

find mine in any textbook on transmission lines. If you'd like, I can recommend a half dozen or more.

Roy Lewallen, W7EL

2776. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 23:43:24 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <47227b9e$0$28893$4c368faf@roadrunner.com>
Source record: 35008

"Richard Harrison" <richardharrison@webtv.net> wrote in message
news:5069-472218A7-332@storefull-3256.bay.webtv.net...
> Stefan Wolfe wrote:
> "The best earth ground is obtained by creating 180 1/4 wavelength
> radials from the base of the vertical element".
>
> Adequate but likely overkill. This was all settled in 1937 by RCA`s
> Brown, Lewis, and Epstein. See Fig. 2.19 on page 120 of Ed Laport`s
> "Radio Antenna Engineering".
>
> Best regards, Richard Harrison, KB5WZI

Yes, radials simulate a true earth ground by empirical test. They are an excellent counterpoise...the best. But by definition, they are not earth ground.

2777. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 23:46:50 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <47227c82$0$16519$4c368faf@roadrunner.com>
Source record: 35009

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:KKpUi.542$yV6.341@newssvr25.news.prodigy.net...
> This thread is started to allow anyone who believes
> in "waves of average power" to say so and explain
> why they believe such.

My MFJ tuner has a scale called "Average Power", along with "PEP". Gosh, if my MFJ tuner has it on the dial, it exists! :-))

2778. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 23:48:33 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <47227ccc$0$19632$4c368faf@roadrunner.com>
Source record: 35010

```
"Stefan Wolfe" <stefan@eml.com> wrote in message
news:47227b35$0$25641$4c368faf@roadrunner.com...
>
> "Richard Harrison" <richardharrison@webtv.net> wrote in message
> news:12032-472232FE-281@storefull-3252.bay.webtv.net...
>> Bruce in Alaska wrote:
>> "Power Distribution Ground is not the same as RF Ground and mostly the
>> two are Mutually Exclusive.
>>
>> Mostly Bruce is right. But, I`ve worked in many broadcast plants and can
>> assure you that the radial grounding system is more than adequate as a
>> power distribution ground except for code compliance which may require a
>> ground rod and/or connection to a metallic water pipe. The radials are
>> the best RF ground.
>>
>> Best regards, Richard Harrison, KB5WZI
>
> I agree that radials certainly make a food RF counterpoise.
Er, I meant "good" counterpoise (humility for typo error).
```

2779. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 23:49:31 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13i4v8em20t92e0@corp.supernews.com>
Source record: 35011

I haven't read the article, but are different mobile antennas being compared on different vehicles, or the same vehicle? It's amazing how many people don't realize that the vehicle is fully half the antenna, and may in many cases play a more important role in determining overall radiating efficiency than the supposed "antenna". So it's impossible to draw any conclusions about mobile antennas based on comparisons done when they're mounted on different vehicles. It's as much a test of the vehicle's effectiveness as a radiator as it is the antenna's.

Roy Lewallen, W7EL

2780. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-26 23:55:10 UTC
From: charlie <wehatespam@wymsey.co.uk>
Message-ID: <PpmdnSwlVffV47_anZ2dnUVZ8rKdnZ2d@pipex.net>
Source record: 35012

James Barrett wrote:
> Hi, I just got my new (used) HF rig, and I strung up a half wave dipole
> for 10 meters using 28.4 mhz in my calculations. Several hours later I
> am getting an SWR reading of 2:1 at 28.4mhz. Is that pretty good or
> should I try to do better?
>
> I appreciate any opinions.
>
> Jim
>
Jim,

whatever the in and outs as discussed in this thread, if you cut and resonate at 28.4, have the dipole at a decent height, feed it with 50 ohm coax you should get better than 2:1. Do you know what the actual resonant frequency of the dipole + feeder is?

As an example I have a ten metre dipole in my loft, some 25 feet above ground. It resonates at 28.44 at the end of approx 10 metres of 50 ohm coax, the SWR is 1.4:1 . The bandwidth at 2:1 is 28.25 -28.63. At 2.5:1 it is 28.160-28.760. This is before the ATU, after the ATU the TX sees from 1:1 to 1.4:1 over the whole of ten metres. See http://www.radiowymsey.org/FanDipole/FanDipole.html

Charlie.

--
M0WYM
www.radiowymsey.org

2781. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 00:14:55 UTC
From: charlie <wehatespam@wymsey.co.uk>
Message-ID: <tOadnZ628rl0H7_anZ2dneKdnZydnZ2d@pipex.net>
Source record: 35013

Owen Duffy wrote:

<SNIP FROM HERE ON UP TO THE OP>

The guy is looking for answers to his problem and you lot just want to massage egos! FFS, give the guy some input and hold back on the theorising.

Next time the OP has an aerial question he's unlikely to come here :(

--
M0WYM
www.radiowymsey.org

2782. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 00:25:46 UTC
From: charlie <wehatespam@wymsey.co.uk>
Message-ID: <YKSdnZxJXoXoGL_anZ2dnUVZ8v2vnZ2d@pipex.net>
Source record: 35014

Roy Lewallen wrote:
> QST editors can't be expected to be experts on all the topics they have
> to deal with. Over the years, they've dealt with the problem in various
> ways. One was to establish a pool of "Technical Advisors" -- volunteers
<SNIP>
Didn't look to see what you are using to post but could you please
set your line length correctly. Sixty eight characters would do
fine! (E.G. as Thunderbird has corrected your post above.)

Thanks,

Charlie.

--
M0WYM
www.radiowymsey.org

2783. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 00:31:30 UTC
From: charlie <wehatespam@wymsey.co.uk>
Message-ID: <Npednf1GVuBWG7_anZ2dneKdnZydnZ2d@pipex.net>
Source record: 35015

Cecil Moore wrote:
> This thread is started to allow anyone who believes
> in "waves of average power" to say so and explain
> why they believe such.

Thanks but in regards to radio I don't really go in for belief. I realise that you and one or two others have a faith based approach to antennas but I prefer to make them, measure them and then work with them.

Thanks though :)

charlie.

--
M0WYM
www.radiowymsey.org

2784. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 00:33:32 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13i51qupbbr5tda@corp.supernews.com>
Source record: 35016

Stefan Wolfe wrote:
>
> Yes, radials simulate a true earth ground by empirical test. They are an
> excellent counterpoise...the best. But by definition, they are not earth
> ground.

That's interesting. What's a "true earth ground"? What are its
properties? How could you connect an antenna to it?

Roy Lewallen, W7EL

2785. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 00:50:58 UTC
From: Art Clemons <n8blk@aolSPAM.com>
Message-ID: <Y6KdnTGqwcXvFr_anZ2dnUVZ_qbinZ2d@comcast.com>
Source record: 35017

Roy Lewallen wrote:

> I haven't read the article, but are different mobile antennas being
> compared on different vehicles, or the same vehicle? It's amazing how
> many people don't realize that the vehicle is fully half the antenna,
> and may in many cases play a more important role in determining overall
> radiating efficiency than the supposed "antenna". So it's impossible to
> draw any conclusions about mobile antennas based on comparisons done
> when they're mounted on different vehicles. It's as much a test of the
> vehicle's effectiveness as a radiator as it is the antenna's.

Same vehicle, at least that part was correct

2786. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 00:53:06 UTC
From: Art Clemons <n8blk@aolSPAM.com>
Message-ID: <Y6KdnTCqwcVvFr_anZ2dnUVZ_qbinZ2d@comcast.com>
Source record: 35018

charlie wrote:

> Didn't look to see what you are using to post but could you please
> set your line length correctly. Sixty eight characters would do
> fine! (E.G. as Thunderbird has corrected your post above.)
>

Roy seems to be using T'Bird which if I remember correctly defaults to 72 characters per line. Roy's post showed up fine in Knode here too.

2787. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 01:03:06 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13i53id9ofnj867@corp.supernews.com>
Source record: 35019

charlie wrote:
> Roy Lewallen wrote:
>> QST editors can't be expected to be experts on all the topics they have
>> to deal with. Over the years, they've dealt with the problem in various
>> ways. One was to establish a pool of "Technical Advisors" -- volunteers
> <SNIP>
> Didn't look to see what you are using to post but could you please
> set your line length correctly. Sixty eight characters would do
> fine! (E.G. as Thunderbird has corrected your post above.)

I'm using Thunderbird 2.0.0.6, which defaults to flowed rather than fixed width format. Please see http://kb.mozillazine.org/Fixed_width_messages. When flowed text messages are viewed with Thunderbird (at least with mine), they wrap to the window width. If the flowed format is causing a problem for other readers, please email me. If it is a general problem I can force it to post in fixed line width. But let's take the discussion off line.

Roy Lewallen, W7EL

2788. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 01:46:13 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D677AE584Enonenowhere@61.9.191.5>
Source record: 35020

charlie <wehatespam@wymsey.co.uk> wrote in news:PpmdnSwlVffV47
_anZ2dnUVZ8rKdnZ2d@pipex.net:

...
> As an example I have a ten metre dipole in my loft, some 25 feet
> above ground. It resonates at 28.44 at the end of approx 10 metres
> of 50 ohm coax, the SWR is 1.4:1 . The bandwidth at 2:1 is 28.25
> -28.63. At 2.5:1 it is 28.160-28.760. This is before the ATU, after
> the ATU the TX sees from 1:1 to 1.4:1 over the whole of ten metres.

You didn't mention the balun, it is significant.

Owen

2789. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 01:52:28 UTC
From: nm5k@wt.net
Message-ID: <1193449948.869459.298820@y42g2000hsy.googlegroups.com>
Source record: 35021

On Oct 26, 1:20 pm, Michael Coslo <m...@psu.edu> wrote:

>
> I've considered putting a tuner on my Bugcatcher for 80 meters, but
> haven't. The thing is so narrow there that the alternative is two taps
> for the phone portion of the band.

That would more more for impedance matching rather than the
loading coil itself. I have no real problem with that. I've often used
simple L network tuners for matching mobile antennas.
The system I have a problem with is using the tuner as the
loading coil itself. It's usually a disaster as far as efficiency.
Maximum current is at the coil, and often that coil will be
surrounded by body metal. Not good.. Poor current distribution
through the whip, and low overall efficiency. Not good..
If they left out bugcatchers in the test, no wonder all those
tuner fed things looked so good... :(
If your antenna acts very "high Q", that's actually good. :)
It means it's probably a pretty decent radiator.
I'd be more worried if it acted overly broadbanded, or low Q.
You won't lose much if you use a tuner for Z matching in your
case.
MK

2790. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 02:04:10 UTC
From: nm5k@wt.net
Message-ID: <1193450650.036549.307760@57g2000hsv.googlegroups.com>
Source record: 35022

On Oct 26, 5:53 pm, Art Clemons <n8...@aolSPAM.com> wrote:
> Richard Harrison wrote:
> > No problem with a tuner. "The input power was the same on each antenna."
>
> How can the input power be the same if it's going through the tuner? The
> input power is the same at the input of the tuner, but we have absolutely
> no idea what the output power from the tuner is. Isn't that a problem for
> a fair test? Would not a more reasonable approach be to use something like
> Wattmeter and get the antenna resonant? I've seen folks who used antenna
> tuners find out the tuner can get really hot into some loads? If the tuner
> is consuming some of the RF as heat, that's power not reaching the antenna
> ergo not a fair test.

I may be missing the story...Is he feeding all these whips with the
tuner
alone, with no loading coil, or he feeding coil loaded antennas with
a
tuner for impedance matching?
I got the impression he was using the tuner alone, with no other
loading
coils on the whips.
I have no real problem with using a tuner for impedance matching
as long as it's not the actual loading coil.
I guess without seeing the article, it's hard to tell what his point
is.
MK

2791. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 02:15:36 UTC
From: konstans@hotmail.com
Message-ID: <oo75i3t89pgtubnmu48fa73mqchedp4lva@4ax.com>
Source record: 35023
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but google

posts from these sorucees are fakes
but till at least terranews is back running well I might use anyserver that comes to hand

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

2792. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 02:15:41 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D67CAD45BDBnonenowhere@61.9.191.5>
Source record: 35024

"Stefan Wolfe" <stefan@eml.com> wrote in
news:47227c82$0$16519$4c368faf@roadrunner.com:

> My MFJ tuner has a scale called "Average Power", along with "PEP".
> Gosh, if my MFJ tuner has it on the dial, it exists! :-))

Well, you would believe anything.

Some MFJ tuners that have a PEP switch do not read PEP reasonably accurately on speech. Some of them that don't work (eg 949E) have a place on the board for the transistor amplifier that is incorporated in other models, and they can be fixed by adding the 10 cent transistor and one or two other parts... but it is a huge job to get the PCB out of the tuner to do the work.

The 'Average Power' reading might be reasonably accurate on an unmodulated carrier, but it is certainly not on a complex waveform like speech, and is another example of MFJ's labelling. In the so-called 'average power' mode, the circuit is a half wave peak responding RF detector with a short (wrt speech) decay time constant driving a D'Arsonval meter movement which responds to the average current where the current is proportional to square root of power under constant carrier.

The BS in the 'average power' story is revealed by measuring the average power of a Morse transmitter sending continuous dits with 50% duty cycle... the 'average power' reading instruments are unlikely to read 50% of the key down power, and the reading is likely to vary significantly with dit speed.

A similar experiment will reveal the failure of some of the MFJ PEP power meters to correctly indicate PEP on the Morse waveform.

Owen

2793. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 03:13:01 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <4722acd5$0$16484$4c368faf@roadrunner.com>
Source record: 35025

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:13i51qupbbr5tda@corp.supernews.com...
> Stefan Wolfe wrote:
>>
>> Yes, radials simulate a true earth ground by empirical test. They are an
>> excellent counterpoise...the best. But by definition, they are not earth
>> ground.
>
> That's interesting. What's a "true earth ground"?

It is the reference point to which all electromagnetic phenomena on Earth is
at zero potential.

>What are its properties?

A magnitude of zero.

> How could you connect an antenna to it?

With a conductive material.

2794. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 03:19:28 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <4722ae42$0$25722$4c368faf@roadrunner.com>
Source record: 35026

"Owen Duffy" <none@no.where> wrote in message
news:Xns99D67CAD45BDBnonenowhere@61.9.191.5...
> "Stefan Wolfe" <stefan@eml.com> wrote in
> news:47227c82$0$16519$4c368faf@roadrunner.com:
>
>> My MFJ tuner has a scale called "Average Power", along with "PEP".
>> Gosh, if my MFJ tuner has it on the dial, it exists! :-))
>
> Well, you would believe anything.

No more "Mr. Nice Guy", huh?
>
> Some MFJ tuners that have a PEP switch do not read PEP reasonably
> accurately on speech...

(blah blah blah.....)

I guess the joke with smiley symbol was either lost on you, or, your superfluous attempt to add rationality to a comment that was obviously intended to be humorous is rather fruitless. In any case, cheer up, maybe have a beer and 73.

2795. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 03:41:52 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13i5cs3d5gshs9f@corp.supernews.com>
Source record: 35027

Let me add a little to Owen's excellent explanation.

We can mathematically separate any two currents into a "common mode" (or even mode) current and a "differential mode" (or odd mode) current. If the two currents are equal in magnitude and opposite in direction, the common mode component is zero; if they're equal in magnitude and in the same direction, the differential mode component is zero.

This mathematical trickery is very useful in analyzing transmission lines, because superposition allows us to treat the effects of the two mode currents separately and sum the results. In a transmission line, the differential mode current is sometimes appropriately called the "transmission line" current, and the common mode current the "antenna" current. This is because the differential mode current conforms to all the transmission line rules -- that is, it behaves as though it and it alone is being carried by the transmission line, and its properties can be found by applying normal transmission line equations and analysis. No radiation results from the transmission line currents. (In practice, a very small amount of radiation results from the differential current on a non-coax line, but if it's significant, a poor choice of transmission line was made.) And the common mode current behaves just like any other current on a single conductor (or identical currents on two parallel conductors) - it creates a radiating field. The conductor carrying the current is, by any definition, an antenna. So if we want to eliminate feedline radiation we need to eliminate (or, practically speaking, reduce to a small value) the common mode current.

To do this analysis with a symmetrical line such as twinlead or open wire line, we use the currents on the two conductors as the two currents to separate into common and differential mode components. We can do exactly the same thing with coax, using the current on the inner conductor as one of the currents to be separated, and the vector total current on the inside and outside of the shield to be the other. If we do this, we find that the two types of line behave identically: If the common mode current is zero, the line won't radiate (and can be considered balanced). If it isn't, the line will. Equations and analysis are identical. Either type of line can be balanced or unbalanced.

Coaxial lines do, however, have an interesting characteristic not shared by other kinds -- the differential and common mode components aren't simply a mathematical convenience, but are actually physically separate. If we do the analysis described above, we find that the common mode current equals the current on the outside of the shield and the differential current equals the current on the inside. As Owen pointed out, the differential current is solely on the inside of the shield and

the common mode current solely on the outside. While this makes the
effects of each mode current easier to visualize and sometimes to
measure, the net effects of common mode and differential currents are
exactly the same for coaxial and non-coaxial lines.

Roy Lewallen, W7EL

Owen Duffy wrote:
> "Tam/WB2TT" <t-tammaru@c0mca$t.net> wrote in
> news:-e6dnVeFKNA4uYXanZ2dnUVZ_vCknZ2d@comcast.com:
>
> ...
>> The choke suppresses the common mode signal. There will still be
>> current flowing on the shield which will have the same magnitude as
>> the current flowing in the center conductor. You are not throwing away
> ...
>
> This might just be really loose language, but assuming fully effective
> skin effect (which is a reasonable assumption for most practical coaxial
> cables at HF):
>
> The current flowing on the outside of the inner conductor is accompanied
> by a current equal in magnitude and opposite in direction flowing on the
> inside of the outer conductor.
>
> Skin effect isolates the inner of the outer conductor from the outer of
> the outer conductor, but current on the inner of the outer conductor may
> contribute to current on the outer of the outer conductor depending on
> the treatment of the shield at the ends of the cable.
>
> So, a choke formed by coiling the coaxial cable or placing ferrite
> sleeves on the cable affects the impedance in the current path of the
> outer of the outer conductor and does not directly affect what is
> happening inside the coax.
>
> Mind you, this concept is not universally accepted by hams.
>
> In the case of coax, so-called common mode current flows only on the
> outside of the outer conductor, and differential mode current flows only
> on the inside of the outer conductor and outside of the inner conductor.
>
> Owen

2796. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 03:45:40 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13i5d37jeafd5c5@corp.supernews.com>
Source record: 35028

Stefan Wolfe wrote:
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:13i51qupbbr5tda@corp.supernews.com...
>> Stefan Wolfe wrote:
>>> Yes, radials simulate a true earth ground by empirical test. They are an
>>> excellent counterpoise...the best. But by definition, they are not earth
>>> ground.
>> That's interesting. What's a "true earth ground"?
>
> It is the reference point to which all electromagnetic phenomena on Earth is
> at zero potential.
>
>> What are its properties?
>
> A magnitude of zero.
>
>> How could you connect an antenna to it?
>
> With a conductive material.

Thanks. I see it's time for me to leave this discussion.

Roy Lewallen, W7EL

2797. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 03:47:13 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D68C31DB1CDnonenowhere@61.9.191.5>
Source record: 35029

"Stefan Wolfe" <stefan@eml.com> wrote in
news:4722ae42$0$25722$4c368faf@roadrunner.com:

> I guess the joke with smiley symbol was either lost on you,

You are a funny fellow... plonk.

2798. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 04:08:01 UTC
From: kb9rqz@hotmail.com
Message-ID: <pce5i31ltbb21b2ncbkd1sss6kcg8p82bt@4ax.com>
Source record: 35030
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS
a calsiss post

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but google

posts from these sorucees are fakes
but till at least terranews is back running well I might use anyserver that comes to hand

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

2799. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 04:10:55 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <4722ba46$0$11079$4c368faf@roadrunner.com>
Source record: 35031

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:13i5d37jeafd5c5@corp.supernews.com...
>
>
> Stefan Wolfe wrote:
>> "Roy Lewallen" <w7el@eznec.com> wrote in message
>> news:13i51qupbbr5tda@corp.supernews.com...
>>> Stefan Wolfe wrote:
>>>> Yes, radials simulate a true earth ground by empirical test. They are
>>>> an excellent counterpoise...the best. But by definition, they are not
>>>> earth ground.
>>> That's interesting. What's a "true earth ground"?
>>
>> It is the reference point to which all electromagnetic phenomena on Earth
>> is at zero potential.
>>
>>> What are its properties?
>>
>> A magnitude of zero.
>>
>>> How could you connect an antenna to it?
>>
>> With a conductive material.
>
> Thanks. I see it's time for me to leave this discussion.

Sorry if the material discussed herein has exceeded the scope of a US Extra
Class license holder's electronics background.

2800. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 04:14:44 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <4722bb36$0$4986$4c368faf@roadrunner.com>
Source record: 35032

"Owen Duffy" <none@no.where> wrote in message
news:Xns99D68C31DB1CDnonenowhere@61.9.191.5...
> "Stefan Wolfe" <stefan@eml.com> wrote in
> news:4722ae42$0$25722$4c368faf@roadrunner.com:
>
>> I guess the joke with smiley symbol was either lost on you,
>
> You are a funny fellow... plonk.

Thanks for the compliment, from one who has the sense of humor of Darth
Vader. (oh yeah, plonk)

2801. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 04:15:35 UTC
From: richardharrison@webtv.net
Message-ID: <18886-4722BB67-67@storefull-3257.bay.webtv.net>
Source record: 35033

Art Clemons wrote:
"Would not a more reasonable approach be to use something like a
Wattmeter and get the antenna resonant?"

You have a point. The wattmeter was on the input to the tuner and we
don`t know what the tuner`s loss is. If the loss is negligible,
everything should be OK, and "the input power was the same on each
antenna."

Best regards, Richard Harrison, KB5WZI

2802. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 05:27:32 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <8%zUi.17300$JD.15098@newssvr21.news.prodigy.net>
Source record: 35034

Richard Harrison wrote:
> Cecil, W5DXP wrote:
> "Have you ever measured such?"
>
> My Bird Model 43 Instruction book says:
> "---designed to measure power flow and load match in 50 ohm coaxial
> transmission lines."
> I`ve used it many times.

Would you agree it is indirectly measuring joules/sec
not watts/sec? That would be energy flow.
--
73, Cecil http://www.w5dxp.com

2803. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 05:31:34 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <W2AUi.17301$JD.5444@newssvr21.news.prodigy.net>
Source record: 35035

Gene Fuller wrote:
> In the standing wave model the energy
> simply sloshes back and forth within a single half-wave loop. No energy
> collisions; no problems at all.

The problem is that it is impossible for EM waves to
do that. An EM wave flows in one direction until it
encounters a physical impedance discontinuity. It
cannot "slosh back and forth" in reality.
--
73, Cecil http://www.w5dxp.com

2804. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 05:36:57 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <Z7AUi.17303$JD.13620@newssvr21.news.prodigy.net>
Source record: 35036

Stefan Wolfe wrote:
> "Cecil Moore" <nospam@w5dxp.com> wrote:
>> This thread is started to allow anyone who believes
>> in "waves of average power" to say so and explain
>> why they believe such.
>
> My MFJ tuner has a scale called "Average Power", along with "PEP". Gosh, if
> my MFJ tuner has it on the dial, it exists! :-))

The average power is the joules passing a fixed
point in one second. It is the joules that are
flowing, not the watts.
--
73, Cecil http://www.w5dxp.com

2805. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 05:39:51 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <HaAUi.17304$JD.1634@newssvr21.news.prodigy.net>
Source record: 35037

charlie wrote:
> Cecil Moore wrote:
>> This thread is started to allow anyone who believes
>> in "waves of average power" to say so and explain
>> why they believe such.
>
> Thanks but in regards to radio I don't really go in for belief.

So you don't even believe in ohm's law and the
principle of conservation of energy?
--
73, Cecil http://www.w5dxp.com

2806. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 07:00:28 UTC
From: Tehrasha Darkon <darkon@netins.net>
Message-ID: <pan.2007.10.27.07.00.52@netins.net>
Source record: 35038

On Sat, 27 Oct 2007 00:10:55 -0400, Stefan Wolfe wrote:

> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:13i5d37jeafd5c5@corp.supernews.com...

[snippy]

>> Thanks. I see it's time for me to leave this discussion.
>
> Sorry if the material discussed herein has exceeded the scope of a US
> Extra Class license holder's electronics background.

LMAO.

2807. 古董（1912-1949）民国瓷茶壶528把、瓷器400件，Antique 1912-1949 Porcelain teapot 528 chinaware 400 invitation visit

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 07:11:00 UTC
From: xjx588 <xjx_588@126.com>
Message-ID: <1193469060.762198.8030@e34g2000pro.googlegroups.com>
Source record: 35039

Antique 1912-1949 Porcelain teapot 528 chinaware 400 invitation visit
world Only pure variety the antique chinaware series big collection
has the very big collection value and the development good
opportunity!!!
Website http://www.xjx588.com
E-mail xjx_588@tom.com
xjx_588@126.com
Antique collection metropolis
City Shengzhou Zhejiang China
Thanks !
Jianxiong Xu

古董（1912-1949）民国瓷茶壶528把、瓷器400件，
全保真中华民国瓷茶壶528把、瓷器400件请观赏。
请祥阅我网站图片、说明，并请联系我，谢谢！
徐建雄
古艺轩古董收藏之都
网站：http://www.xjx588.com
电邮：xjx_588@tom.com
xjx_588@126.com
电话：0575-83103731
手机：13002632782

2808. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 07:11:23 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D6AECF47402nonenowhere@61.9.191.5>
Source record: 35040

Owen Duffy <none@no.where> wrote in
news:Xns99D536F7C49D6nonenowhere@61.9.191.5:

...
> Now, there will be a body of opinion that it doesn't matter what you
> do, you will still get QSOs, that it therefore 'works'. It sounds from
> your question that you are more interested in that shallow level of
> engagements, so read around.

That didn't come out right... it should have read:

Now, there will be a body of opinion that it doesn't matter what you
do, you will still get QSOs, that it therefore 'works'. It sounds from
your question that you are more interested than that shallow level of
engagements, so read around.

Owen

2809. Distance between beams

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 09:05:47 UTC
From: Barrett <barrett@blueyounder.co.uk>
Message-ID: <LbDUi.104508$lV4.45588@fe2.news.blueyonder.co.uk>
Source record: 34941

I have two beams I want to install on the same mast. They are, Cushcraft MA5B and an 9 element crossed Tonna.

What is the optimal distance that these antennas should be spaced?

What is the minimum distance apart can they be mounted before they have a negative effect on each other?

Does it matter what beam is mounted on the top?

Does it make any difference how close the beams are mounted to the rotator?

This is the first time that I have put any beams up, so I thought I better get some good advice first.

Thanks

2810. Re: Distance between beams

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 10:22:02 UTC
From: Ian White GM3SEK <gm3sek@ifwtech.co.uk>
Message-ID: <f36R3ZOKFxIHFAnV@ifwtech.co.uk>
Source record: 34943

Barrett wrote:
>I have two beams I want to install on the same mast. They are, Cushcraft
>MA5B and an 9 element crossed Tonna.
>
>What is the optimal distance that these antennas should be spaced?
>
>What is the minimum distance apart can they be mounted before they have a
>negative effect on each other?
>
>Does it matter what beam is mounted on the top?
>
>Does it make any difference how close the beams are mounted to the rotator?
>
>This is the first time that I have put any beams up, so I thought I better
>get some good advice first.
>
This page will show you how to think about it:
http://www.ifwtech.co.uk/g3sek/stacking/stacking2.htm

You'll see that most of your questions have no definite answers. Very close stacking will cause some degradation in performance - especially for the 2m antenna [1] - but how much degradation depends on the specific antennas, and can only be determined by modelling.

The "optimum" stacking distance will also depend on your priorities between HF and VHF, and on how much degradation in performance you are willing to accept.

There are also mechanical considerations. It might be better to mount the HF minibeam at the very top of the stub mast [2], to put it a larger number of wavelengths above ground; but that will create a lot more bending force than mounting the HF antenna below the VHF one. Again, this is very much your decision.

With winter coming on, I'd suggest that you go for strength over performance, and mount the HF antenna very low on the stub mast. The 2m yagi could then be about 1 metre above it. This may not be completely "optimum", but it stands a better chance of still being there next spring.

[1] Whichever way up you install the two beams, the mast will affect the performance of the vertically polarized part of the 2m crossed yagi, because it's in the same plane as the vertical elements. Even if you mount the crossed yagi at the top of a fibreglass mast, the coax feedlines will have much the same effect. However, if you are only using vertical polarization for semi-local working with good signal/noise

margins, you may decide to accept the reduced performance. Most people do, or aren't even aware of it.

[2] Since you are posting from the UK to an international newsgroup, we'd better be aware of a US/UK language difference. In the USA, the "mast" usually means only the tube above the rotator, and people may be assuming that of course you'll have a lattice tower :-) In the UK, the word "mast" is often applied to the whole structure (even to a lattice tower) and we usually call the rotating part a "stub mast".

--

73 from Ian GM3SEK 'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.co.uk/g3sek

2811. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 10:25:24 UTC
From: Dave <noone@nowhere.com>
Message-ID: <omEUi.56$BD.45@trndny06>
Source record: 34942

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:8%zUi.17300$JD.15098@newssvr21.news.prodigy.net...
> Richard Harrison wrote:
>> Cecil, W5DXP wrote:
>> "Have you ever measured such?"
>>
>> My Bird Model 43 Instruction book says:
>> "---designed to measure power flow and load match in 50 ohm coaxial
>> transmission lines."
>> I`ve used it many times.
>
> Would you agree it is indirectly measuring joules/sec
> not watts/sec? That would be energy flow.
> --
> 73, Cecil http://www.w5dxp.com

actually, its not measure energy or power, its measuring voltage and current
and presenting you with the result of a calculation that represents power.

2812. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 10:30:03 UTC
From: Dave <noone@nowhere.com>
Message-ID: <LqEUi.1496$p%.1190@trndny03>
Source record: 34944

"Richard Fry" <rfry@adams.net> wrote in message
news:fftsbd$a1s$1@aioe.org...
> "Roy Lewallen" wrote:
>>>> All the power produced by the transmitter arrives at the antenna
>>>> less whatever is lost as heat in the transmission line.
> _________
>
> Roy,
>
> If a transmitter produces r-f power, and a load connected to that
> transmitter via a transmission line dissipates any of that r-f power, then
> would you not agree that such an r-f transmission line conducts at least
> whatever r-f power is dissipated by that load?
>
> And if such a transmission line can conduct power in one direction
> (incident), it can also conduct power equally well in the opposite
> direction (reflected), until the net result of incident + reflected causes
> line failure.
>
> When the Zo of a transmission line matches the Zo of a load at its far
> end, then that far-end Z absorbs nearly 100% of the power delivered there
> by that transmission line.
>
> If those impedances are not matched, a reflection is generated that may
> lead to the real-world, destructive and periodic effects on the
> transmission line that I reported from personal experience, earlier in
> this thread.
>
> RF
>
no transmission line conducts power. it conducts moving electrons which are
measured as a current or voltage. power is a figment of our mathematics
that has created a convenient way to take the current and/or voltage and/or
impedance (only 2 of the 3 are needed) and convert them to a measure of
energy flow, or power, that happens to be a nice conceptual way to view
things. we could just as well give up all readings of power and state taht
a transmitter produces 1 amp into a 50 ohm load instead of that it produces
50 watts... the former is more descriptive, the latter is simpler for the
non-engineer.

2813. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 10:32:55 UTC
From: Dave <noone@nowhere.com>
Message-ID: <rtEUi.402$sZ.209@trndny04>
Source record: 34945

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:Z7AUi.17303$JD.13620@newssvr21.news.prodigy.net...
> Stefan Wolfe wrote:
>> "Cecil Moore" <nospam@w5dxp.com> wrote:
>>> This thread is started to allow anyone who believes
>>> in "waves of average power" to say so and explain
>>> why they believe such.
>>
>> My MFJ tuner has a scale called "Average Power", along with "PEP". Gosh,
>> if my MFJ tuner has it on the dial, it exists! :-))
>
> The average power is the joules passing a fixed
> point in one second. It is the joules that are
> flowing, not the watts.
> --
> 73, Cecil http://www.w5dxp.com

its the electrons that are flowing... everything else is a figment of your
slide rule.

2814. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 13:07:47 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <DKGUi.284320$ax1.146119@bgtnsc05-news.ops.worldnet.att.net>
Source record: 34946

Cecil Moore wrote:
> Gene Fuller wrote:
>> In the standing wave model the energy simply sloshes back and forth
>> within a single half-wave loop. No energy collisions; no problems at all.
>
> The problem is that it is impossible for EM waves to
> do that. An EM wave flows in one direction until it
> encounters a physical impedance discontinuity. It
> cannot "slosh back and forth" in reality.

I guess you still cannot get over your fixation on traveling waves. Too
bad; you miss so much when wearing blinders.

73,
Gene
W4SZ

2815. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 13:10:15 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <YMGUi.640$%Y6.493@nlpi061.nbdc.sbc.com>
Source record: 34947

Dave wrote:
> "Cecil Moore" <nospam@w5dxp.com> wrote:
>> Would you agree it is indirectly measuring joules/sec
>> not watts/sec? That would be energy flow.
>
> actually, its not measure energy or power, its measuring voltage and current
> and presenting you with the result of a calculation that represents power.

Like I said, it is indirectly measuring power -
by sampling the voltage and current at a fixed
point in a known Z0 environment and performing
some in-phase and out-of-phase phasor additions.

The point is that it is displaying watts at a
fixed point, i.e. average joules flowing past
a fixed point in one second. It is the joules
that are flowing, not the watts.
--
73, Cecil http://www.w5dxp.com

2816. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 13:20:39 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <HWGUi.641$%Y6.180@nlpi061.nbdc.sbc.com>
Source record: 34948

Dave wrote:
> power is a figment of our mathematics

With EM waves, you can say the same thing about
voltage and current. The energy in the photons
has a much more basic relationship to reality.
--
73, Cecil http://www.w5dxp.com

2817. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 13:23:06 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <ZYGUi.642$%Y6.44@nlpi061.nbdc.sbc.com>
Source record: 34949

Dave wrote:
> its the electrons that are flowing... everything else is a figment of your
> slide rule.

EM waves move at the speed of light - electrons don't.
The flowing energy in an EM wave is photonic.
--
73, Cecil http://www.w5dxp.com

2818. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 13:34:10 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <m7HUi.643$%Y6.411@nlpi061.nbdc.sbc.com>
Source record: 34950

Gene Fuller wrote:
> I guess you still cannot get over your fixation on traveling waves. Too
> bad; you miss so much when wearing blinders.

Sloshing EM energy is only a math shortcut which
violates the laws of physics and exists only in
your mind (and others). Traveling EM waves agree
with the laws of physics and can be observed with
one's own eyes.

When math shortcuts become one's religion, one
has a definite problem.
--
73, Cecil http://www.w5dxp.com

2819. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 13:56:45 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <xsHUi.27384$kj1.7382@bgtnsc04-news.ops.worldnet.att.net>
Source record: 34951

Cecil Moore wrote:
> Gene Fuller wrote:
>> I guess you still cannot get over your fixation on traveling waves.
>> Too bad; you miss so much when wearing blinders.
>
> Sloshing EM energy is only a math shortcut which
> violates the laws of physics and exists only in
> your mind (and others). Traveling EM waves agree
> with the laws of physics and can be observed with
> one's own eyes.
>
> When math shortcuts become one's religion, one
> has a definite problem.

Cecil,

I will not argue with you about mobile antenna shootouts.

However, I will compare my physics education to yours any day. Which law(s) of physics do you think I have violated?

8-)

73,
Gene
W4SZ

2820. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 14:08:37 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <ffvgpb$em3$1@aioe.org>
Source record: 34952

"Roy Lewallen" wrote:
> All the power produced by the transmitter arrives at the antenna
> less whatever is lost as heat in the transmission line.

How about a case of a non-resonant transmission line whose Zo equals the load Z except for a discrete mismatch somewhere in the line? Reflections from that mismatch will be dissipated in the reverse port termination of a circulator installed at the input of the line. Clearly not all of the power available at the output of the circulator arrived at the antenna (less line loss).

> ..Unless the line is perfectly matched, there will be repeating points of
> high current and of high voltage. Depending on the nature of the conductor
> and insulator, either or both of these can cause localized heating. In the
> example you gave, the damage is almost certainly caused by high current
> rather than high voltage. ...

I agree, and misunderstood your original post.

RF

2821. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 14:32:08 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193495528.393479.147410@50g2000hsm.googlegroups.com>
Source record: 34953

On 27 Oct, 06:23, Cecil Moore <nos...@w5dxp.com> wrote:
> Dave wrote:
> > its the electrons that are flowing... everything else is a figment of your
> > slide rule.
>
> EM waves move at the speed of light - electrons don't.
> The flowing energy in an EM wave is photonic.
> --
> 73, Cecil http://www.w5dxp.com

Cecil
I don't want to argue the point but as you know
I consider radio radiator to be an electron accellerator
ie a tank circuit using a full wave (slow wave) length
inductance with a very low capacitance (LC ratio).
It is well known that the electron in a accellerator
aproaches the speed of sound.
The cloud of accellerated particles or electrons
in this case is non polarized which allowes for a
tumbling straight line trajectory.
Now some will be angry accusing me of putting out
false information again or flaunting comedic writing again
but I am being serious

Is the above in conflict with your statement?

Best regards
Art Unwin KB9MZ......XG

2822. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 16:13:08 UTC
From: kb9rqz@hotmail.com
Message-ID: <7so6i3prd6s8orf15be7kul637i5ria9ci@4ax.com>
Source record: 34954
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS
still true today forging flooder

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but google

posts from these sorucees are fakes
but till at least terranews is back running well I might use anyserver that comes to hand

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

2823. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 16:39:30 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <6RJUi.17340$JD.12226@newssvr21.news.prodigy.net>
Source record: 34955

Gene Fuller wrote:
> However, I will compare my physics education to yours any day. Which
> law(s) of physics do you think I have violated?

"Sloshing" EM waves violates the conservation
of momentum principle.

What reverses the momentum of an EM wave at the
point where it starts "sloshing" around when
there is no physical impedance discontinuity?

In terms of optics, how does light energy just
start "sloshing" around in free space when
there is no change in index of refraction in
the medium?

Given Hecht's equation for a light standing wave
in free space, where are the terms that cause
the "sloshing"?
--
73, Cecil http://www.w5dxp.com

2824. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 16:58:21 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <N6KUi.17343$JD.11239@newssvr21.news.prodigy.net>
Source record: 34956

art wrote:
> It is well known that the electron in a accellerator
> aproaches the speed of sound.

Speed of sound? That's much too fast for free
electrons in a wire conductor.

> Is the above in conflict with your statement?

In DC circuits, electrons flow at speeds that can
be expressed in cm/min. In RF circuits they hardly
have time to move at all in one direction before
they have to start moving in the other direction.

It is the photons released by energy-rich electrons
that flow at the speed of light. The EM wave energy
is associated with those photons.
--
73, Cecil http://www.w5dxp.com

2825. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 17:27:17 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <VxKUi.27812$kj1.22745@bgtnsc04-news.ops.worldnet.att.net>
Source record: 34957

Cecil Moore wrote:
> Gene Fuller wrote:
>> However, I will compare my physics education to yours any day. Which
>> law(s) of physics do you think I have violated?
>
> "Sloshing" EM waves violates the conservation
> of momentum principle.
>
> What reverses the momentum of an EM wave at the
> point where it starts "sloshing" around when
> there is no physical impedance discontinuity?
>
> In terms of optics, how does light energy just
> start "sloshing" around in free space when
> there is no change in index of refraction in
> the medium?
>
> Given Hecht's equation for a light standing wave
> in free space, where are the terms that cause
> the "sloshing"?

Cecil,

That's a good one. I did not know that a transmission line is "free space".

Try again.

73,
Gene
W4SZ

2826. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 17:50:06 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193507406.482947.131330@50g2000hsm.googlegroups.com>
Source record: 34958

On 27 Oct, 09:58, Cecil Moore <nos...@w5dxp.com> wrote:
> art wrote:
> > It is well known that the electron in a accellerator
> > aproaches the speed of sound.
>
> Speed of sound? That's much too fast for free
> electrons in a wire conductor.

Free electrons accellerate from the SURFACE of a wire radiator
so are you saying that it produces photons that move at the speed of
light?
If so how is the accelleration vector imparted to the photon that then
gives
it a further increase in accelleration.
I was thinking that the electron travelled in a straight line until
it was able to find a material surface that is willing or able to
accept a free electron before it decays such as a diamagnetic material
I am travelling in murky waters here so any guidance would be helpfull
Best regards
Art Unwin KB9MZ....XG

>
> > Is the above in conflict with your statement?
>
> In DC circuits, electrons flow at speeds that can
> be expressed in cm/min. In RF circuits they hardly
> have time to move at all in one direction before
> they have to start moving in the other direction.
>
> It is the photons released by energy-rich electrons
> that flow at the speed of light. The EM wave energy
> is associated with those photons.
> --
> 73, Cecil http://www.w5dxp.com

2827. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 17:59:11 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <leedna_2aKn04b7anZ2dnUVZ_o6knZ2d@adelphia.com>
Source record: 34959
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

<kb9rqz@hotmail.com> wrote in message
news:7so6i3prd6s8orf15be7kul637i5ria9ci@4ax.com...
> On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>K4YZ wrote:
>>> Nope.
>>>
>>> The IP Address and servers are complete proof that I do NOT share
>>> any annonymous character's "address".
>>>
>>> Sounds like Lennie, to me....
>>>
>>> Steve, K4YZ
>>>
>>
>>To anyone with even an elementary understanding of anonymous proxies,
>>anonymous remailers, zombie backdoors, etc., the ability to change ones
>>IP address and header details is simplistic, indeed, with little time
>>spent anyone can appear to be "coming" from anywhere in the world.
>>
>>You waste my time. Worse, you think us all idiots here. You remind me
>>of the "street smart" prosecutors and defense attorneys who stack jurys
>>with members of little or no technical knowledge and then call in
>>"expert witnesses" and propose arguments of technical details to boggle
>>their minds.
>>
>>You have only proven that you, yourself are either ignorant to such
>>technical details, or else you are indeed street smart, I favor the
>>latter in this case (however, if you in the dark about such things, 15
>>minutes on google will enlighten you.)
>>
>>JS
> still true today forging flooder
>
> "one useless man is disgrace 2 become a law firm 3 or more become a
> congress"
> adams
>
> woger you are a Congress all in your own head
>
> http://kb9rqz.bravejournal.com/
> altopia is never used by KB9RQZ

> nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but
> google
>
> posts from these sorucees are fakes
> but till at least terranews is back running well I might use anyserver
> that comes to hand
>
> and get ou the newly recovered KB9RQZ.blogspot.com as well
>
> G
>
> --
> Posted via a free Usenet account from http://www.teranews.com

You never make an OT post about anything - all you do is keep posting this
stupid woger comment!
You are the biggest jerk around!

2828. Dumb antenna height question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 18:01:30 UTC
From: merlin-7 <merlin-7@sc.rr.com>
Message-ID: <47237d87$0$4998$4c368faf@roadrunner.com>
Source record: 34960

I know the 1/4 wave height rule but I am a bit confused so maybe someone can help me out here.

I have been using a parallel, 3 wire, inverted V with its feed point at 40 feet with good results.

I will be changing my home QTH as soon as my current home sells and will need to erect another tower.

My question is, what can I expect to happen if I placed the same antenna with its feed point at 50 feet? 60 feet?

I know what theory says should happen but I do not know anybody that has raised a HF antenna from one height to another (other than going up over 100 feet or more) In my case, I will be lucky if I can get the feed point at 60 -70 feet.

Can someone tell me what happens when a low antenna is raised from 40 feet to 60 feet from personal experience or something similar ?

Including noise levels etc.

Thanks all
Most of what I have learned about antennas has been from reading posts here as I am a self taught ham for the most part. You can only learn so much from books and sometimes, what is supposed to happen in theory and what really happens is two different things.

Thanks again...

2829. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 18:37:20 UTC
From: "konstans@hotmail.com" <konstans@GayMail>
Message-ID: <1bsm21.8ne.19.1@news.alt.net>
Source record: 34961
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

>
> You never make an OT post about anything - all you do is keep posting
> this stupid woger comment!
> You are the biggest jerk around!
But, don't you see? It is not Mark's fault.
Just ask him.
It is Roger's fault.
It is Dloyd's fault.
It is Steve's fault.
It is Delorean's fault.
Heck, it is your fault, too.
Are you beginning to see the pattern here? When Mark behaves stupidly (a daily occurence) it is ALWAYS someone else's fault. He just cannot help himself, don't you see?

But you are right about one thing. He IS the biggest jerk (I have a less kind descriptor) around.

2830. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 18:38:36 UTC
From: "konstans@hotmail.com" <konstans@GayMail>
Message-ID: <1bsm4d.cmt.17.1@news.alt.net>
Source record: 34962
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

Nitwit Mark floods the group with inane posts and then has the unmitigated
stupidity to call someone else a "flooder".
How ironic.

2831. Re: Dumb antenna height question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 18:40:36 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13i71h5sk25ep19@corp.supernews.com>
Source record: 34963

"merlin-7" <merlin-7@sc.rr.com> wrote in message
news:47237d87$0$4998$4c368faf@roadrunner.com...
> I know the 1/4 wave height rule but I am a bit confused so maybe someone
> can help me out here.
>
> I have been using a parallel, 3 wire, inverted V with its feed point at
> 40
> feet with good results.
>
> I will be changing my home QTH as soon as my current home sells and will
> need to erect another tower.
>
> My question is, what can I expect to happen if I placed the same antenna
> with its feed point at 50 feet? 60 feet?
>
> I know what theory says should happen but I do not know anybody that has
> raised a HF antenna from one height to another (other than going up over
> 100
> feet or more) In my case, I will be lucky if I can get the feed point at
> 60 -70 feet.
>
> Can someone tell me what happens when a low antenna is raised from 40 feet
> to 60 feet from personal experience or something similar ?
>
> Including noise levels etc.
>

I have 2 80 meter antennas up. On is about 20 feet and the other is around
45 feet. They are supported so they are just about flat tops. Close in ,
out to about 100 miles there does not usually seem to be any differance.
Sometimes the higher antenna is 2 or 3 s-units beter. Someitmes it does not
make much differance depending on where the stations are.

I would say just go as high as you can and don't worry about it.

2832. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 19:17:03 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193512623.034607.176440@o80g2000hse.googlegroups.com>
Source record: 34964

On 27 Oct, 10:50, art <aun...@insightbb.com> wrote:
> On 27 Oct, 09:58, Cecil Moore <nos...@w5dxp.com> wrote:
>
> > art wrote:
> > > It is well known that the electron in a accellerator
> > > aproaches the speed of sound.
>
> > Speed of sound? That's much too fast for free
> > electrons in a wire conductor.
>
> Free electrons accellerate from the SURFACE of a wire radiator
> so are you saying that it produces photons that move at the speed of
> light?
> If so how is the accelleration vector imparted to the photon that then
> gives
> it a further increase in accelleration.
> I was thinking that the electron travelled in a straight line until
> it was able to find a material surface that is willing or able to
> accept a free electron before it decays such as a diamagnetic material
> I am travelling in murky waters here so any guidance would be helpfull
> Best regards
> Art Unwin KB9MZ....XG
>
>
>
>
>
> > > Is the above in conflict with your statement?
>
> > In DC circuits, electrons flow at speeds that can
> > be expressed in cm/min. In RF circuits they hardly
> > have time to move at all in one direction before
> > they have to start moving in the other direction.
>
> > It is the photons released by energy-rich electrons
> > that flow at the speed of light. The EM wave energy
> > is associated with those photons.
> > --
> > 73, Cecil http://www.w5dxp.com- Hide quoted text -
>
> - Show quoted text -

Sorry about the "sound" comment. While typing I was
also thinking of ten metres in the old days where

one could hear the sound of a around the world type propagation
Regards
Art

2833. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 19:58:30 UTC
From: kb9rqz@hotmail.com
Message-ID: <g267i3tjo4ggtqmf9mh5ub2vpjtemudbdi@4ax.com>
Source record: 34965
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Sat, 27 Oct 2007 13:59:11 -0400, "John Doe" <hgorden@adelphia.net>
wrote:

>
><kb9rqz@hotmail.com> wrote in message
>news:7so6i3prd6s8orf15be7kul637i5ria9ci@4ax.com...
>> On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
>> <assemblywizard@gmail.com> wrote:
>>
>>>K4YZ wrote:
>>>> Nope.
>>>>
>>>> The IP Address and servers are complete proof that I do NOT share
>>>> any annonymous character's "address".
>>>>
>>>> Sounds like Lennie, to me....
>>>>
>>>> Steve, K4YZ
>>>>
>>>
>>>To anyone with even an elementary understanding of anonymous proxies,
>>>anonymous remailers, zombie backdoors, etc., the ability to change ones
>>>IP address and header details is simplistic, indeed, with little time
>>>spent anyone can appear to be "coming" from anywhere in the world.
>>>
>>>You waste my time. Worse, you think us all idiots here. You remind me
>>>of the "street smart" prosecutors and defense attorneys who stack jurys
>>>with members of little or no technical knowledge and then call in
>>>"expert witnesses" and propose arguments of technical details to boggle
>>>their minds.
>>>
>>>You have only proven that you, yourself are either ignorant to such
>>>technical details, or else you are indeed street smart, I favor the
>>>latter in this case (however, if you in the dark about such things, 15
>>>minutes on google will enlighten you.)
>>>
>>>JS
>> still true today forging flooder
>>
>> "one useless man is disgrace 2 become a law firm 3 or more become a
>> congress"
>> adams
>>

>> woger you are a Congress all in your own head
>>
>> http://kb9rqz.bravejournal.com/
>> altopia is never used by KB9RQZ
>> nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but
>> google
>>
>> posts from these sorucees are fakes
>> but till at least terranews is back running well I might use anyserver
>> that comes to hand
>>
>> and get ou the newly recovered KB9RQZ.blogspot.com as well
>>
>> G
>>
>> --
>> Posted via a free Usenet account from http://www.teranews.com
>
>You never make an OT post about anything -
you are lying

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but google

posts from these sorucees are fakes
but till at least terranews is back running well I might use anyserver that comes to hand

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

2834. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 20:31:07 UTC
From: kb9rqz@hotmail.com
Message-ID: <pv77i35atocdm7deomksldufeq2ll048db@4ax.com>
Source record: 34966
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna,alt.military.cap

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS
you can runn but you can hardly hide

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but google

posts from these sorucees are fakes
but till at least terranews is back running well I might use anyserver that comes to hand

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

2835. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 20:59:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13i79m69g8k60be@corp.supernews.com>
Source record: 34967

Richard Fry wrote:
> "Roy Lewallen" wrote:
>> All the power produced by the transmitter arrives at the antenna
>> less whatever is lost as heat in the transmission line.
>
> How about a case of a non-resonant transmission line whose Zo equals the
> load Z except for a discrete mismatch somewhere in the line?
> Reflections from that mismatch will be dissipated in the reverse port
> termination of a circulator installed at the input of the line. Clearly
> not all of the power available at the output of the circulator arrived
> at the antenna (less line loss).

Certainly if you install a resistor in the line, whether connected to a circulator or not, some of the power leaving the transmitter won't make it to the load. I was assuming when I made my statement that no such objects were placed in the transmission line, and would hope this condition would be obvious to most readers.

>> ..Unless the line is perfectly matched, there will be repeating points
>> of high current and of high voltage. Depending on the nature of the
>> conductor and insulator, either or both of these can cause localized
>> heating. In the example you gave, the damage is almost certainly
>> caused by high current rather than high voltage. ...
>
> I agree, and misunderstood your original post.

Roy Lewallen, W7EL

2836. Re: Dumb antenna height question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 21:02:45 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13i79ro8rt0sq37@corp.supernews.com>
Source record: 34968

What you need is the free demo version of EZNEC, available from
http://eznec.com, or any other of the currently available antenna
modeling programs. It'll answer your questions very clearly.

What happens in practice is what happens in theory. If it doesn't, then
the theory is incorrect, incomplete, or misapplied.

Roy Lewallen, W7EL

merlin-7 wrote:
> I know the 1/4 wave height rule but I am a bit confused so maybe someone
> can help me out here.
>
> I have been using a parallel, 3 wire, inverted V with its feed point at 40
> feet with good results.
>
> I will be changing my home QTH as soon as my current home sells and will
> need to erect another tower.
>
> My question is, what can I expect to happen if I placed the same antenna
> with its feed point at 50 feet? 60 feet?
>
> I know what theory says should happen but I do not know anybody that has
> raised a HF antenna from one height to another (other than going up over 100
> feet or more) In my case, I will be lucky if I can get the feed point at
> 60 -70 feet.
>
> Can someone tell me what happens when a low antenna is raised from 40 feet
> to 60 feet from personal experience or something similar ?
>
> Including noise levels etc.
>
> Thanks all
> Most of what I have learned about antennas has been from reading posts here
> as I am a self taught ham for the most part. You can only learn so much from
> books and sometimes, what is supposed to happen in theory and what really
> happens is two different things.
>
> Thanks again...
>
>

2837. antenna reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 21:25:35 UTC
From: a <me@privacy.net>
Message-ID: <4723accd$1_2@mk-nntp-2.news.uk.tiscali.com>
Source record: 34969

I'm looking at making a parabolic reflector for a wifi link.

I'm trying to work out the distance required between the radiating
element and the reflector.
Should it be an odd number of quarter wavelengths, or an even number?

(An odd number of quarter wavelengths would be required if there is a
180 degree phase change on reflection, and
and even number would b required if there is no phase change).

So... is there a 180 degree phase change at the reflector?

TIA

2838. Re: antenna reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 21:47:57 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D75974EC2Dnonenowhere@61.9.191.5>
Source record: 34970

a <me@privacy.net> wrote in news:4723accd$1_2@mk-nntp-
2.news.uk.tiscali.com:

> I'm looking at making a parabolic reflector for a wifi link.
>
> I'm trying to work out the distance required between the radiating
> element and the reflector.
> Should it be an odd number of quarter wavelengths, or an even number?

It is a little different to that, the feed would normally be placed at the focus of the parabola so that rays emanating from the feed travel to the reflector, and are reflected in a parallel beam.

For optimal results, the feed should illuminate only the reflector, and the illumination should be such that the reflected waves have a constant power density over the projected area of the reflector.

Owen

2839. Re: Antenna earth stakes - a tricky one!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 22:14:59 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <PLOUi.662$%Z2.407@nlpi068.nbdc.sbc.com>
Source record: 34971

Stefan Wolfe wrote:
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:13i51qupbbr5tda@corp.supernews.com...
>> Stefan Wolfe wrote:
>>> Yes, radials simulate a true earth ground by empirical test. They are an
>>> excellent counterpoise...the best. But by definition, they are not earth
>>> ground.
>> That's interesting. What's a "true earth ground"?
>
> It is the reference point to which all electromagnetic phenomena on Earth is
> at zero potential.
>
>> What are its properties?
>
> A magnitude of zero.
>
>> How could you connect an antenna to it?
>
> With a conductive material.
>
>

Just where is this wonderful place? If I were
to guess, I'd say it'd have to be in Texas.
73,
Tom Donaly, KA6RUH

2840. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 22:22:31 UTC
From: Tom Donaly <dtdonaly@sbcglobal.net>
Message-ID: <ISOUi.663$%Z2.59@nlpi068.nbdc.sbc.com>
Source record: 34972

Cecil Moore wrote:
> Stefan Wolfe wrote:
>> "Cecil Moore" <nospam@w5dxp.com> wrote:
>>> This thread is started to allow anyone who believes
>>> in "waves of average power" to say so and explain
>>> why they believe such.
>>
>> My MFJ tuner has a scale called "Average Power", along with "PEP".
>> Gosh, if my MFJ tuner has it on the dial, it exists! :-))
>
> The average power is the joules passing a fixed
> point in one second. It is the joules that are
> flowing, not the watts.

You've finally written something so stupid that it's
beyond replying to.
73,
Tom Donaly, KA6RUH

2841. Re: antenna reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 22:56:06 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13i7gg7hd2bop82@corp.supernews.com>
Source record: 34973

"a" <me@privacy.net> wrote in message
news:4723accd$1_2@mk-nntp-2.news.uk.tiscali.com...
> I'm looking at making a parabolic reflector for a wifi link.
>
> I'm trying to work out the distance required between the radiating element
> and the reflector.
> Should it be an odd number of quarter wavelengths, or an even number?
>
> (An odd number of quarter wavelengths would be required if there is a 180
> degree phase change on reflection, and
> and even number would b required if there is no phase change).
>
> So... is there a 180 degree phase change at the reflector?
>
>
It is not a mater of odd or even wavelengths. The antenna needs to be at
the focus of the reflector. The feed needs to be adjusted so it will put
most of the signal on the reflector without too much over spray.

All the above will depend on what the shape of the dish is.

2842. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 23:34:58 UTC
From: Denny <k8do@mailblocks.com>
Message-ID: <1193528098.936326.102080@o3g2000hsb.googlegroups.com>
Source record: 34974

On Oct 27, 12:15 am, richardharri...@webtv.net (Richard Harrison)
wrote:
> Art Clemons wrote:
>
> "Would not a more reasonable approach be to use something like a
> Wattmeter and get the antenna resonant?"
>
> You have a point. The wattmeter was on the input to the tuner and we
> don`t know what the tuner`s loss is. If the loss is negligible,
> everything should be OK, and "the input power was the same on each
> antenna."
>
> Best regards, Richard Harrison, KB5WZI

I received back a fairly detailed email from the QST editor
involved... I will reply to him next week... I will incorporate some
of the comments on here - with attribution to the author(s)..
Everything (except private comments) will be shared here...
Right now, back to the inhumane QRN on 80 meter cqww...

denny / k8do

2843. Re: Distance between beams

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 23:44:30 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <X7SdnQ1SENXNUL7anZ2dnUVZ_qSonZ2d@comcast.com>
Source record: 34975

"Barrett" <barrett@blueyounder.co.uk> wrote in message
news:LbDUi.104508$lV4.45588@fe2.news.blueyonder.co.uk...
>I have two beams I want to install on the same mast. They are, Cushcraft
>MA5B and an 9 element crossed Tonna.
>
> What is the optimal distance that these antennas should be spaced?
>
> What is the minimum distance apart can they be mounted before they have a
> negative effect on each other?
>
> Does it matter what beam is mounted on the top?
>
> Does it make any difference how close the beams are mounted to the
> rotator?
>
> This is the first time that I have put any beams up, so I thought I better
> get some good advice first.
>
> Thanks
>
>
I have a tubular tower, with no way to have a thrust bearing. So, I have the
Hygain TH3 tribander resting right on top of the rotor flange. 6 m beam is 7
feet up from there, and 2 m beam is half way in between. I care more about
6 than I do about 2 meters. I did run an EZNEC simulation of my 6 m beam
with/without an HF beam 7 feet below it; there was no change in performance.

Tam/WB2TT

2844. Re: antenna reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-27 23:54:11 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <EcQUi.249$qQ5.122@newsfe07.phx>
Source record: 34976

"a" <me@privacy.net> wrote in message
news:4723accd$1_2@mk-nntp-2.news.uk.tiscali.com...
> I'm looking at making a parabolic reflector for a wifi link.
>
> I'm trying to work out the distance required between the radiating
> element and the reflector.
> Should it be an odd number of quarter wavelengths, or an even number?

Here it is, exactly:

f = D-squared divided by 16-times-d,

where f is the focal length of the dish (your "distance between the
radiating element and the reflector"),
D is the dish diameter, and
d is the depth of the dish

Example; If your five foot dish is a foot deep, D-squared is 25 and
16-times-d is 16; Divide 25 by 16 and mount the radiator (or "feed" in dish
parlance) 1.56 feet away, about 1' 6 3/4". The example is a fairly deep
dish; the shallower the dish, the longer the focal length.

See also http://www.satsig.net/focal-length-parabolic-dish.htm but note he
uses letter "c" for the depth.

2845. Re: antenna reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 00:01:28 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99D7702568907nonenowhere@61.9.191.5>
Source record: 34977

"Sal M. Onella" <salmonella@food.poisoning.org> wrote in
news:EcQUi.249$qQ5.122@newsfe07.phx:

>
> "a" <me@privacy.net> wrote in message
> news:4723accd$1_2@mk-nntp-2.news.uk.tiscali.com...
>> I'm looking at making a parabolic reflector for a wifi link.
>>
>> I'm trying to work out the distance required between the radiating
>> element and the reflector.
>> Should it be an odd number of quarter wavelengths, or an even number?
>
> Here it is, exactly:
>
> f = D-squared divided by 16-times-d,
>
> where f is the focal length of the dish (your "distance between the
> radiating element and the reflector"),
> D is the dish diameter, and
> d is the depth of the dish
>
> Example; If your five foot dish is a foot deep, D-squared is 25 and
> 16-times-d is 16; Divide 25 by 16 and mount the radiator (or "feed"
> in dish parlance) 1.56 feet away, about 1' 6 3/4". The example is a
> fairly deep dish; the shallower the dish, the longer the focal
> length.
>
> See also http://www.satsig.net/focal-length-parabolic-dish.htm but
> note he uses letter "c" for the depth.

Sal, more more complicated for offset feed... Owen

2846. Re: Distance between beams

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 00:16:47 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13i7l7frevqr23@corp.supernews.com>
Source record: 34978

"Barrett" <barrett@blueyounder.co.uk> wrote in message
news:LbDUi.104508$lV4.45588@fe2.news.blueyonder.co.uk...
>I have two beams I want to install on the same mast. They are, Cushcraft
>MA5B and an 9 element crossed Tonna.
>
> What is the optimal distance that these antennas should be spaced?
>
> What is the minimum distance apart can they be mounted before they have a
> negative effect on each other?
>
> Does it matter what beam is mounted on the top?
>
> Does it make any difference how close the beams are mounted to the
> rotator?
>
> This is the first time that I have put any beams up, so I thought I better
> get some good advice first.
>
> Thanks
>

I don't think there is any real optimal distance within what most can put
us. I tried to look at what was needed vers what I could put up about a
year ago. I did see the url Ian listed. My requirements was to have about
15 feet of mast out the top of the tower that is 57 feet out of the ground..
At the top went a M2 432 beam, about 4 feet below that went a M2 2 meter
beam both beams were on a 15 foot boom, and close to 5 feet under that went
a 5 element 6 meter beam on a 18 foot boom. Just over the top of the tower
was a 3 element triband for 20,15,and 10 meters. All antennas are
horizontal. I am sure this is nowhere near optimal but just the best for
what I had to work with.

2847. Re: antenna reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 01:00:02 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <oaRUi.380$qQ5.111@newsfe07.phx>
Source record: 34979

"Owen Duffy" <none@no.where> wrote in message
news:Xns99D7702568907nonenowhere@61.9.191.5...
> "Sal M. Onella" <salmonella@food.poisoning.org> wrote in
> news:EcQUi.249$qQ5.122@newsfe07.phx:
>
> >
> > "a" <me@privacy.net> wrote in message
> > news:4723accd$1_2@mk-nntp-2.news.uk.tiscali.com...
> >> I'm looking at making a parabolic reflector for a wifi link.
> >>
> >> I'm trying to work out the distance required between the radiating
> >> element and the reflector.
> >> Should it be an odd number of quarter wavelengths, or an even number?
> >
> > Here it is, exactly:
> >
> > f = D-squared divided by 16-times-d,
> >
> > where f is the focal length of the dish (your "distance between the
> > radiating element and the reflector"),
> > D is the dish diameter, and
> > d is the depth of the dish
> >
> > Example; If your five foot dish is a foot deep, D-squared is 25 and
> > 16-times-d is 16; Divide 25 by 16 and mount the radiator (or "feed"
> > in dish parlance) 1.56 feet away, about 1' 6 3/4". The example is a
> > fairly deep dish; the shallower the dish, the longer the focal
> > length.
> >
> > See also http://www.satsig.net/focal-length-parabolic-dish.htm but
> > note he uses letter "c" for the depth.
>
> Sal, more more complicated for offset feed... Owen

Yeah, I thought of that and I have no ready backup for offset. I have
played with both kinds and I'm happy that my two offset feed dishes each
came with a feed-mounting arm already in place. ;-)

My two offset feed dishes have the feed 22.5 degrees offset from the
structural centerline of the dish; the angle of peak signal is therefore
22.5 degees off in the other direction. (Avoiding UP, DOWN, LEFT & RIGHT.)
I think that's a standard.

Given that an offset dish is, I think, more properly described as a
parabolic section, rather than a parabola, I would use the edge of the dish

nearer to the feed for the "f" measurement. (This is intuition with no backup. I'm naked here, so don't look.)

Speaking of dishes, I have two, a 7-foot and a 10-foot, to give away. San Diego, California area. So far, no takers as I cast the net ever wider.

2848. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 01:16:34 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <RpRUi.1278$%Y6.591@nlpi061.nbdc.sbc.com>
Source record: 34980

Gene Fuller wrote:
> That's a good one. I did not know that a transmission line is "free space".

It doesn't matter what the medium is - EM waves
obey the conservation of momentum principle in
any medium. Your "sloshing" waves violate that
accepted principle of physics. Sorry.
--
73, Cecil http://www.w5dxp.com

2849. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 01:36:31 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <zIRUi.1283$%Y6.148@nlpi061.nbdc.sbc.com>
Source record: 34981

art wrote:
> Free electrons accelerate from the SURFACE of a wire radiator
> so are you saying that it produces photons that move at the speed of
> light?

When energy is imparted to an electron, if nothing
changed, it would accelerate. But the electron, instead
of accelerating appreciably, gives up the extra energy
in the form of a photon. Quoting Feynman in "QED":

So now, I present you the three basic actions, from which
all the phenomena of light (RF) and electrons arise.
- Action #1: A photon goes from place to place.
- Action #2: An electron goes from place to place.
- Action #3: An electron emits or absorbs a photon.

Electrons have a rest mass and like all other rest masses
not equal to zero cannot travel at the speed of light. The
particle accelerators that accelerate electrons to near the
speed of light require a lot of power.

> If so how is the acceleration vector imparted to the photon that then
> gives it a further increase in acceleration.

Electrons emit photons which are traveling at the speed
of light. Photons can travel at no other speed although
the VF of the medium affects the absolute speed.

> I was thinking that the electron traveled in a straight line until
> it was able to find a material surface that is willing or able to
> accept a free electron before it decays such as a diamagnetic material

At RF frequencies, the movement of electrons is more like
a vibration than like a travel. They are essentially
vibrating within a small volume while absorbing and emitting
photons. And of course, the uncertainty principle applies.
--
73, Cecil http://www.w5dxp.com

2850. Re: Dumb antenna height question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 01:39:14 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <5LRUi.1284$%Y6.471@nlpi061.nbdc.sbc.com>
Source record: 34982

merlin-7 wrote:
> My question is, what can I expect to happen if I placed the same antenna
> with its feed point at 50 feet? 60 feet?

The free demo version of EZNEC will tell you.
--
73, Cecil http://www.w5dxp.com

2851. Re: antenna reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 01:42:39 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <jORUi.1945$R%4.223@trnddc05>
Source record: 34983

```
"Sal M. Onella" <salmonella@food.poisoning.org> wrote in message
news:oaRUi.380$qQ5.111@newsfe07.phx...
>
> "Owen Duffy" <none@no.where> wrote in message
> news:Xns99D7702568907nonenowhere@61.9.191.5...
>> "Sal M. Onella" <salmonella@food.poisoning.org> wrote in
>> news:EcQUi.249$qQ5.122@newsfe07.phx:
>>
>> >
>> > "a" <me@privacy.net> wrote in message
>> > news:4723accd$1_2@mk-nntp-2.news.uk.tiscali.com...
>> >> I'm looking at making a parabolic reflector for a wifi link.
>> >>
>> >> I'm trying to work out the distance required between the radiating
>> >> element and the reflector.
>> >> Should it be an odd number of quarter wavelengths, or an even number?
>> >
>> > Here it is, exactly:
>> >
>> > f = D-squared divided by 16-times-d,
>> >
>> > where f is the focal length of the dish (your "distance between the
>> > radiating element and the reflector"),
>> > D is the dish diameter, and
>> > d is the depth of the dish
>> >
>> > Example; If your five foot dish is a foot deep, D-squared is 25 and
>> > 16-times-d is 16; Divide 25 by 16 and mount the radiator (or "feed"
>> > in dish parlance) 1.56 feet away, about 1' 6 3/4". The example is a
>> > fairly deep dish; the shallower the dish, the longer the focal
>> > length.
>> >
>> > See also http://www.satsig.net/focal-length-parabolic-dish.htm but
>> > note he uses letter "c" for the depth.
>>
>> Sal, more more complicated for offset feed... Owen
>
> Yeah, I thought of that and I have no ready backup for offset. I have
> played with both kinds and I'm happy that my two offset feed dishes each
> came with a feed-mounting arm already in place. ;-)
>
> My two offset feed dishes have the feed 22.5 degrees offset from the
> structural centerline of the dish; the angle of peak signal is therefore
> 22.5 degees off in the other direction. (Avoiding UP, DOWN, LEFT &
```

> RIGHT.)
> I think that's a standard.
>
> Given that an offset dish is, I think, more properly described as a
> parabolic section, rather than a parabola, I would use the edge of the
> dish
> nearer to the feed for the "f" measurement. (This is intuition with no
> backup. I'm naked here, so don't look.)
>
> Speaking of dishes, I have two, a 7-foot and a 10-foot, to give away. San
> Diego, California area. So far, no takers as I cast the net ever wider.

Hi Sal

Tell me more about the 7 footer. I'm in Los Alamitos and would drive to
San Diego to get a 7 footer that'd work for 2.4 GHz.

Thanks
Jerry

2852. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 01:43:46 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <lPRUi.1285$%Y6.865@nlpi061.nbdc.sbc.com>
Source record: 34984

Tom Donaly wrote:
> You've finally written something so stupid that it's
> beyond replying to.

Finally, a reply with some technical content - NOT!
--
73, Cecil http://www.w5dxp.com

2853. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 02:01:55 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193536915.420985.308740@o80g2000hse.googlegroups.com>
Source record: 34985

On 27 Oct, 18:36, Cecil Moore <nos...@w5dxp.com> wrote:
> art wrote:
> > Free electrons accelerate from the SURFACE of a wire radiator
> > so are you saying that it produces photons that move at the speed of
> > light?
>
> When energy is imparted to an electron, if nothing
> changed, it would accelerate. But the electron, instead
> of accelerating appreciably, gives up the extra energy
> in the form of a photon. Quoting Feynman in "QED":
>
> So now, I present you the three basic actions, from which
> all the phenomena of light (RF) and electrons arise.
> - Action #1: A photon goes from place to place.
> - Action #2: An electron goes from place to place.
> - Action #3: An electron emits or absorbs a photon.
>
> Electrons have a rest mass and like all other rest masses
> not equal to zero cannot travel at the speed of light. The
> particle accelerators that accelerate electrons to near the
> speed of light require a lot of power.
>
> > If so how is the acceleration vector imparted to the photon that then
> > gives it a further increase in acceleration.
>
> Electrons emit photons which are traveling at the speed
> of light. Photons can travel at no other speed although
> the VF of the medium affects the absolute speed.
>
> > I was thinking that the electron traveled in a straight line until
> > it was able to find a material surface that is willing or able to
> > accept a free electron before it decays such as a diamagnetic material
>
> At RF frequencies, the movement of electrons is more like
> a vibration than like a travel. They are essentially
> vibrating within a small volume while absorbing and emitting
> photons. And of course, the uncertainty principle applies.
> --
> 73, Cecil http://www.w5dxp.com

I have to read up on things a bit more because if a free
electron resides on the surface of a radiator and is
blasted off that surface then it has mass.
It then cannot settle until it finds a surface that will accept it

which must be a similar material that it was blasted off from
i.e. one that will accept free electrons.
So frankly I am not educated enough to understand the nature of
photons
unless it consists of a field created by the accelerated particle
thus it would be better for me to retire gracefully.
Appreciated your responses
Regards
Art
I think I am out of my depth here Cecil

2854. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 02:25:14 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <eqSUi.15650$ID6.7146@newssvr27.news.prodigy.net>
Source record: 34987

art wrote:
> I have to read up on things a bit more because if a free
> electron resides on the surface of a radiator and is
> blasted off that surface then it has mass.

Think of a photon being emitted instead of an electron.

> It then cannot settle until it finds a surface that will accept it
> which must be a similar material that it was blasted off from
> i.e. one that will accept free electrons.

Think of a photon being absorbed by an electron
or radiated into space.

> I think I am out of my depth here Cecil

Quantum Electro Dynamics has revolutionized our
understanding of fields and waves which are digital
(quantized) rather than analog. :-)
--
73, Cecil http://www.w5dxp.com

2855. Re: Distance between beams

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 02:25:32 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnfi7sos.26tm.bit-bucket@shell.config.com>
Source record: 34986

On Sat, 27 Oct 2007 19:44:30 -0400, Tam/WB2TT wrote:
> "Barrett" <barrett@blueyounder.co.uk> wrote:
>>I have two beams I want to install on the same mast. They are, Cushcraft
>>MA5B and an 9 element crossed Tonna.
>>
>> What is the optimal distance that these antennas should be spaced?
>>
>> What is the minimum distance apart can they be mounted before they have a
>> negative effect on each other?
>>
>> Does it matter what beam is mounted on the top?
>>
>> Does it make any difference how close the beams are mounted to the
>> rotator?
>>
>> This is the first time that I have put any beams up, so I thought I better
>> get some good advice first.
>
> I have a tubular tower, with no way to have a thrust bearing. So, I have the
> Hygain TH3 tribander resting right on top of the rotor flange. 6 m beam is 7
> feet up from there, and 2 m beam is half way in between. I care more about
> 6 than I do about 2 meters. I did run an EZNEC simulation of my 6 m beam
> with/without an HF beam 7 feet below it; there was no change in performance.

Almost an identical lash-up here, Tam. The CC A3S is at the bottom of
the mast, the CC 215WB is halfway up the mast, and the CC A50S is at the
top. The mast is about 6-7 feet high:

http://jonz.net/W3DHJ/images/W3DHJ_Tower.jpeg

The OP needs to ask whether or not the antennas radiate best when dis-
assembled in the gargae, or up in the air and connected to coax? HI!HI!

73
Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
*** Killfiling google posts: <http://jonz.net/ng.htm>

2856. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 03:06:37 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193540797.556158.313080@22g2000hsm.googlegroups.com>
Source record: 34988

On 27 Oct, 19:25, Cecil Moore <nos...@w5dxp.com> wrote:
> art wrote:
> > I have to read up on things a bit more because if a free
> > electron resides on the surface of a radiator and is
> > blasted off that surface then it has mass.
>
> Think of a photon being emitted instead of an electron.

Can't do that Cecil. I see radiation as an electron being blasted away
from the area that it was at rest with some electrons that are
blasted of but prevented from leaving the immediate vicinity or
equilibrium boundary returning to the host material. I cannot see
what a photon would add to this scenario since the released electrons
have the energy accorded to it by inductive energy instantaneous
energy.
I see no way how to include another energy packet to enhance this
energy exchange
i.e. blast that overcomes the electron inertia such that it escapes

As I stated earlier I am obviously out of my depth by thinking
contrary to those educated in the field
I haven't had a chance to read Feynman as yet unless it is hidden
somewhere on the net. Is it possible he is in error regarding photons
as something separate from electrons in flight?
Best regards
Art

>
> > It then cannot settle until it finds a surface that will accept it
> > which must be a similar material that it was blasted off from
> > i.e. one that will accept free electrons.
>
> Think of a photon being absorbed by an electron
> or radiated into space.
>
> > I think I am out of my depth here Cecil
>
> Quantum Electro Dynamics has revolutionized our
> understanding of fields and waves which are digital
> (quantized) rather than analog. :-)
> --
> 73, Cecil http://www.w5dxp.com

2857. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 04:00:37 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <47240969$0$20632$4c368faf@roadrunner.com>
Source record: 34989

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:zIRUi.1283$%Y6.148@nlpi061.nbdc.sbc.com...
>
> Electrons have a rest mass and like all other rest masses
> not equal to zero cannot travel at the speed of light. The
> particle accelerators that accelerate electrons to near the
> speed of light require a lot of power.

The confusing part to me is that, although photons do not have rest mass, they do have mass. They are particles. As such, RF can be expressed in terms of both waves and particles but it is not useful to try to conceptualize how this works physically. Getting to the title of this thread, "power" is an expression of the work required to move one coulomb (approximately 10E18 distinct electrons) across a potential difference of one volt for 1 second. However, as you say RF power is not about moving electrons, it is about the emission of photons and this must involve the conversion of joules from one type of "work" to another. Perhaps one could say that the average power of the wave is equal to the average power of the moving electrons produced in the radio circuitry multiplied by the radiation efficiency and gain/loss of the antenna but that is a mathematical expression that serves no real purpose in terms of understanding the science. It is this very lack of understanding on my own part that is one reason the study of RF and antennas is interesting to me.

2858. Re: antenna reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 04:06:45 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <uVTUi.21871$XU3.11908@newsfe15.phx>
Source record: 34990

"Jerry Martes" <j.jmartes@verizon.net> wrote in message
news:jORUi.1945$R%4.223@trnddc05...
>
> Tell me more about the 7 footer. I'm in Los Alamitos and would drive
to
> San Diego to get a 7 footer that'd work for 2.4 GHz.
>
> Thanks
> Jerry

See private reply to your email address.

2859. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 09:46:45 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <47245a85$0$25653$4c368faf@roadrunner.com>
Source record: 34891

"art" <aunwin@insightbb.com> wrote in message news:1193540797.556158.313080@
>>
>> Think of a photon being emitted instead of an electron.
>
> Can't do that Cecil. I see radiation as an electron being blasted away
> from the area that it was at rest with some electrons that are
> blasted of but prevented from leaving the immediate vicinity or
> equilibrium boundary returning to the host material. I cannot see
> what a photon would add to this scenario since the released electrons
> have the energy accorded to it by inductive energy instantaneous
> energy.
> I see no way how to include another energy packet to enhance this
> energy exchange
> i.e. blast that overcomes the electron inertia such that it escapes

The electron does not get "blasted" away. It merely goes to a higher energy level. Then when it returns to a lower energy level, the difference in energy is emitted as a photon. The electron does not physically separate from the atom of the antenna conductor material and radiate into free space, only the photonic energy is emitted . This all occurs at a frequency that depends on the tuning of the RF circuit. The antenna conductor should be geometrically sized to support the frequency of the emssions for maximum radiation efficiency. Now, since the emission of photons is also an EM wave emission, the energy emitted has both an electrical and magnetic compoment associated with it. The energy has been converted from the "work" to simply move coulombs (electrons) over a potential voltage difference to "work" needed to radiate photons (waves) into free space. Work is work and it remains the same; what the work accomplishes is different. This part I cannot explain very well since I have no idea how RF freqeuncy, or light or other EM waves can be of both a wave nature and particle (photon) nature, but it is, and that is how the energy conversion works. The dual particle natuire and wave nature of RF/light would almost appear to be "faith based" if it weren't for the large body of mathematics and other physics evidence that supports it.

2860. Re: antenna reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 09:48:18 UTC
From: a <me@privacy.net>
Message-ID: <47245ae2_2@mk-nntp-2.news.uk.tiscali.com>
Source record: 34892

a wrote:
> I'm looking at making a parabolic reflector for a wifi link.
>
> I'm trying to work out the distance required between the radiating
> element and the reflector.
> Should it be an odd number of quarter wavelengths, or an even number?
>
> (An odd number of quarter wavelengths would be required if there is a
> 180 degree phase change on reflection, and
> and even number would b required if there is no phase change).
>
> So... is there a 180 degree phase change at the reflector?
>
> TIA
>
>

Thanks for the replies.

I agree that the radiating element must be placed at the parabola focus
to give minimal beamwidth, and that this condition is met when the
radiating element is placed at the focus (which is given by D^2/16d).

The point remains that I can still choose the parabola parameters to set
the focal length to whatever is desired.
Should I choose them so that the focal length is an odd or even number
of quarter wavelengths?

What I really had in mind was a uniformly radiating element (ie a simple
whip) with a parabolic reflector behind it, like this:-
(x
reflector radiating element

To get the right-going signal from the reflector in phase with the
right-going signal from the radiating element I need to choose the
reflector distance correctly.

I have a feeling that there WILL be a phase inversion at the reflector
but I'm not certain.

The reason that I think that there might be a phase inversion is that
the (radiator plus reflector) could be considered to be a (radiator and
its image). At the (perfectly conducting) reflector the voltage will be
zero and the current will be infinite, which implies that, at the
reflector, the reflected wave must be phase inverted wrt the radiated wave.

Any thoughts?

2861. interference antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 12:24:59 UTC
From: ml <m@di.net>
Message-ID: <m-EE8B91.08245328102007@news.verizon.net>
Source record: 34893

hi

I've been getting alot of interference lately mostly 1-24mhz.

was thinking about using my 817 to snoop around the block to see where it might be comming from

was wondering if anyone has detailed construction instructions on what type of antenna i could easily build

i presume a loop but unsure of how big /how many turns and best way to mate it w/the coax feed as i'd need to connect it via a length of rg58 to the rig

any tips would be greatly appreciated the noise is like s9

ml

2862. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 13:35:16 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193578516.614968.58340@o80g2000hse.googlegroups.com>
Source record: 34894

On 28 Oct, 02:46, "Stefan Wolfe" <ste...@eml.com> wrote:
> "art" <aun...@insightbb.com> wrote in message news:1193540797.556158.313080@
>
> >> Think of a photon being emitted instead of an electron.
>
> > Can't do that Cecil. I see radiation as an electron being blasted away
> > from the area that it was at rest with some electrons that are
> > blasted of but prevented from leaving the immediate vicinity or
> > equilibrium boundary returning to the host material. I cannot see
> > what a photon would add to this scenario since the released electrons
> > have the energy accorded to it by inductive energy instantaneous
> > energy.
> > I see no way how to include another energy packet to enhance this
> > energy exchange
> > i.e. blast that overcomes the electron inertia such that it escapes
>
> The electron does not get "blasted" away. It merely goes to a higher energy
> level. Then when it returns to a lower energy level, the difference in
> energy is emitted as a photon. The electron does not physically separate
> from the atom of the antenna conductor material and radiate into free space,
> only the photonic energy is emitted . This all occurs at a frequency that
> depends on the tuning of the RF circuit. The antenna conductor should be
> geometrically sized to support the frequency of the emssions for maximum
> radiation efficiency. Now, since the emission of photons is also an EM wave
> emission, the energy emitted has both an electrical and magnetic compoment
> associated with it. The energy has been converted from the "work" to simply
> move coulombs (electrons) over a potential voltage difference to "work"
> needed to radiate photons (waves) into free space. Work is work and it
> remains the same; what the work accomplishes is different. This part I
> cannot explain very well since I have no idea how RF freqeuncy, or light or
> other EM waves can be of both a wave nature and particle (photon) nature,
> but it is, and that is how the energy conversion works. The dual particle
> natuire and wave nature of RF/light would almost appear to be "faith based"
> if it weren't for the large body of mathematics and other physics evidence
> that supports it.

Look, I happen to not fully disagree to what you and Cecil are saying.
An electron can be an active part of a substance indynamic form in
orbit around an atom.
You can also have a static form of electron which is at rest.
For radiation I am referring to the dislodfgement of a static
electron.
On the other hand I believe you are referring to a dynamic electron
in

orbit which constitutes part of that of which we see as a mass.
Art

2863. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 13:36:44 UTC
From: Scott <acepilot@bloomer.net>
Message-ID: <NdidnXfRsZLwDbnanZ2dnUVZ_gGdnZ2d@bright.net>
Source record: 34895

Will I be able to communicate with anybody else if I just hook up an
antenna to my transceiver and talk away?

Scott
N0EDV

Jim Higgins wrote:

> On Sat, 27 Oct 2007 16:58:21 GMT, Cecil Moore <nospam@w5dxp.com>
> wrote:
>
>
>>art wrote:
>>
>>>It is well known that the electron in a accellerator
>>>aproaches the speed of sound.
>>
>>Speed of sound? That's much too fast for free
>>electrons in a wire conductor.
>>
>>
>>>Is the above in conflict with your statement?
>>
>>In DC circuits, electrons flow at speeds that can
>>be expressed in cm/min. In RF circuits they hardly
>>have time to move at all in one direction before
>>they have to start moving in the other direction.
>
>
> The RF portion of the above statement is a bit misleading. Electrons
> move (motion due to impressed EMF as opposed to Fermi motion) in
> response to an applied EMF at a speed proportional to current density
> regardless of the frequency of the applied EMF.

--
Scott
http://corbenflyer.tripod.com/
Gotta Fly or Gonna Die
Building RV-4 (Super Slow Build Version)

2864. Re: Slow wave antenna design for top band

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 14:22:22 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193581342.889053.220790@k79g2000hse.googlegroups.com>
Source record: 34896

On 25 Oct, 14:04, Denny <k...@mailblocks.com> wrote:
> Umm a velocity factor of .50 might be attainable with a variation on
> leaky coax... Some of the cheap stuff is already as slow as .66...
> Off the top of my pointy head braided wires wrapped on your form (same
> as you are currently doing) then potted in an appropriate dielectric
> material for filling the braid interstices should slow things down
> some more... The question extant is what material for potting (or for
> adding to your potting resin) will further slow progression of the
> wave front along the braid...
> We know that solid polyethylene dielectric on coax results in a lower
> vf than the foamed materials.. So it appears that denser material
> results in slower wave progression... Perhaps UHMW, or similar might
> suffice...
> Other thoughts come along, such as a flat ribbon with a deeply
> embossed pattern then filled with dielectric might be slower than
> braided wire... Or even a ribbon of screening material similarily
> filled...
> Dunno... Interesting problem...
>
> denny / k8do

I decided on a more direct aproach by winding a two wavelength slow
wave coil
which with the addition of a variometer will change the inductance to
line up with the 7/4
wavelength base for a standard slow wave which will bring the
inductance and the winding wavelength in unison with the slow current
velocity.
Sounds more complicated than it really is
Art KB9MZ

2865. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 14:30:35 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <ri59i3d7db7kpe1ck8mqhvnt8chn08tg67@4ax.com>
Source record: 34897

On Thu, 25 Oct 2007 23:02:12 -0400, Art Clemons <n8blk@aolSPAM.com>
wrote:

>I almost could not believe that an article that starts out with using an
>antenna tuner to deliver all possible power to mobile HF antennas got
>published.
>
>I also noted that the testing antenna was 360 feet away.
>
>I'm waiting to read on here that I've mis-understood a great method of
>measuring HF mobile antennas, but absent a troll or two, I don't expect
>too.
>
As a Student of the Art of Amateur Radio with a special fondness for
antennas I found the article useful and interesting. At least as far
as it went!

Last year I purchased a radio especially to go mobile. I have yet to
find an acceptable mobile HF antenna to use on my Chrysler Minivan. I
am beginning to believe that there are no acceptable solutions to the
problem as I define it.

Further, I have concluded that ALL MOBILE HF installations are poor
compared to a dipole five feet off the ground, some are just worse
than others.

The article simply sheds some light on the practical issues one
encounters with popular alternatives.

I think an auto tuner with whatever whip length one can tolerate is
the best one can do with a Chrysler Minivan.

Modeling programs do not consider the radiation from the loading coils
but field measurements do.

Tuner losses can be estimated from the software in the Arrl Antenna
Books.

If you can write a better article for QST, please do so. But please
remember, most of us don't choose the ethical we drive because of its
ability to carry a less bad radio antenna!

John Ferrell W8CCW
"Life is easier if you learn to
plow around the stumps"

2866. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 15:00:23 UTC
From: Sum Ting Wong <sumtingwong@privacy.net>
Message-ID: <vq89i3ldp1lotobkf6elv3bsabg1u0sp3e@4ax.com>
Source record: 34898

On Sun, 28 Oct 2007 10:30:35 -0400, John Ferrell
<johnferrell@sprintmail.com> wrote:

>I think an auto tuner with whatever whip length one can tolerate is
>the best one can do with a Chrysler Minivan.

Get yourself a copy of AA6GL's "MOBILE.EXE" antenna program and try
various configurations. I'll bet you a (jelly!) donut that your
perception will change.

S.T.W.

2867. Re: antenna reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 16:17:35 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <zC2Vi.4601$R%4.1551@trnddc05>
Source record: 34899

"a" <me@privacy.net> wrote in message
news:47245ae2_2@mk-nntp-2.news.uk.tiscali.com...
>a wrote:
>> I'm looking at making a parabolic reflector for a wifi link.
>>
>> I'm trying to work out the distance required between the radiating
>> element and the reflector.
>> Should it be an odd number of quarter wavelengths, or an even number?
>>
>> (An odd number of quarter wavelengths would be required if there is a 180
>> degree phase change on reflection, and
>> and even number would b required if there is no phase change).
>>
>> So... is there a 180 degree phase change at the reflector?
>>
>> TIA
>>
>>
>
>
> Thanks for the replies.
>
> I agree that the radiating element must be placed at the parabola focus to
> give minimal beamwidth, and that this condition is met when the radiating
> element is placed at the focus (which is given by D^2/16d).
>
> The point remains that I can still choose the parabola parameters to set
> the focal length to whatever is desired.
> Should I choose them so that the focal length is an odd or even number of
> quarter wavelengths?
>
> What I really had in mind was a uniformly radiating element (ie a simple
> whip) with a parabolic reflector behind it, like this:-
> (x
> reflector radiating element
>
> To get the right-going signal from the reflector in phase with the
> right-going signal from the radiating element I need to choose the
> reflector distance correctly.
>
> I have a feeling that there WILL be a phase inversion at the reflector but
> I'm not certain.
>
> The reason that I think that there might be a phase inversion is that the

> (radiator plus reflector) could be considered to be a (radiator and its
> image). At the (perfectly conducting) reflector the voltage will be zero
> and the current will be infinite, which implies that, at the reflector,
> the reflected wave must be phase inverted wrt the radiated wave.
>
> Any thoughts?

Hi "a"

Just a thought -- I think you are concerned with the radiation from the illuminator adding to (or canceling) the radiation from the reflector. Normally, the illuminator is designed to establish a pattern that aims only toward the reflector. But, since you dont wish to shape the radiation pattern from the illuminator, you might want to consider that the total pattern from both the illuminator will depend on how big the reflector is (in wavelengths).
If the parabola is large, the half of the illuminator's radiation in the "wrong" direction wont seriously effect the total pattern, and can be ignored. You might assume the radiation from the reflector is concentrated to be within a 20 degree wide sector (20 dB gain antenna). The radiation from the illuminator in that 20 degree sector is so weak that it will not be noticeable.

The fact is - There are many factors that a designer of parabolic antennas considers. Google

Jerry

2868. Is Texas Radio Products still making Bugcatchers?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 16:46:15 UTC
From: "Damn Ham"@yahoo.com
Message-ID: <q4f9i39hpn6to3qs42fpgb59uqglhg36rp@4ax.com>
Source record: 34900

I bought one a number of years ago, and it still works great. I was wondering if he is still around and making them.

2869. Re: antenna reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 16:58:40 UTC
From: a <me@privacy.net>
Message-ID: <4724bfc0$1_4@mk-nntp-2.news.uk.tiscali.com>
Source record: 34901

> Hi "a"
>
> Just a thought -- I think you are concerned with the radiation from the
> illuminator adding to (or canceling) the radiation from the reflector.
> Normally, the illuminator is designed to establish a pattern that aims only
> toward the reflector. But, since you dont wish to shape the radiation
> pattern from the illuminator, you might want to consider that the total
> pattern from both the illuminator will depend on how big the reflector is
> (in wavelengths).
> If the parabola is large, the half of the illuminator's radiation in the
> "wrong" direction wont seriously effect the total pattern, and can be
> ignored. You might assume the radiation from the reflector is concentrated
> to be within a 20 degree wide sector (20 dB gain antenna). The radiation
> from the illuminator in that 20 degree sector is so weak that it will not be
> noticeable.
>
> The fact is - There are many factors that a designer of parabolic
> antennas considers. Google
>
> Jerry
>
>

Hi Jerry,
Thanks, yes the adding/canceling was what I was trying to address.
I'd Googled on the subject but couldn't find anything that answered that
point. I did come across some interesting sites that described the need
to illuminate the whole of the reflector to make good use of its full
dish size (and hence minimise beamwidth), but I was trying to keep mine
simple.

Treating it simplistically, I guess that, for a given diameter, a deep
parabola (ie the focus well inside the paraboloid) will capture more of
the radiated energy and redirect it in the required direction, than a
shallow parabola would.

I was thinking that I would go for a sheet of aluminium bent into a 2-D
parabola, about 2.5 wavelengths across, giving me a beamwidth of around
0.5 radians Presumably a 2-D parabola would only have gain in 2-D, and
it would be about 2*pi/0.5 = 12, (11dB over a whip).
For a 2.4GHz signal this equates to a parabola 31cm across.

2870. Re: Is Texas Radio Products still making Bugcatchers?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 16:59:54 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99D765B7AD340HuckleberryREMOVEbig@198.186.192.196>
Source record: 34902

> I bought one a number of years ago, and it still works great. I was
> wondering if he is still around and making them.
>

Seems to be a different company now.... Maybe the original company
sold out?

http://www.texasbugcatcher.com

Ed K7AAT

2871. Re: antenna reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 17:26:41 UTC
From: Jerry Martes <j.jmartes@verizon.net>
Message-ID: <ID3Vi.342$oy4.271@trnddc08>
Source record: 34903

"a" <me@privacy.net> wrote in message
news:4724bfc0$1_4@mk-nntp-2.news.uk.tiscali.com...
>
>> Hi "a"
>>
>> Just a thought -- I think you are concerned with the radiation from
>> the illuminator adding to (or canceling) the radiation from the
>> reflector. Normally, the illuminator is designed to establish a pattern
>> that aims only toward the reflector. But, since you dont wish to shape
>> the radiation pattern from the illuminator, you might want to consider
>> that the total pattern from both the illuminator will depend on how big
>> the reflector is (in wavelengths).
>> If the parabola is large, the half of the illuminator's radiation in
>> the "wrong" direction wont seriously effect the total pattern, and can be
>> ignored. You might assume the radiation from the reflector is
>> concentrated to be within a 20 degree wide sector (20 dB gain antenna).
>> The radiation from the illuminator in that 20 degree sector is so weak
>> that it will not be noticeable.
>>
>> The fact is - There are many factors that a designer of parabolic
>> antennas considers. Google
>>
>> Jerry
>
> Hi Jerry,
> Thanks, yes the adding/canceling was what I was trying to address.
> I'd Googled on the subject but couldn't find anything that answered that
> point. I did come across some interesting sites that described the need to
> illuminate the whole of the reflector to make good use of its full dish
> size (and hence minimise beamwidth), but I was trying to keep mine simple.
>
> Treating it simplistically, I guess that, for a given diameter, a deep
> parabola (ie the focus well inside the paraboloid) will capture more of
> the radiated energy and redirect it in the required direction, than a
> shallow parabola would.
>
> I was thinking that I would go for a sheet of aluminium bent into a 2-D
> parabola, about 2.5 wavelengths across, giving me a beamwidth of around
> 0.5 radians Presumably a 2-D parabola would only have gain in 2-D, and it
> would be about 2*pi/0.5 = 12, (11dB over a whip).
> For a 2.4GHz signal this equates to a parabola 31cm across.

Hi "a"

I saw http://www.nodomainname.co.uk/parabolic/parabolic.htm on Google
and thought it fit your line of interest. It appears that your goals are
realistic and dont require extensive research on the design of parabaloids.
Try Googling again and see if you cant find some data on WiFi, instead of
parabola antenna design. I have seen many WiFi antenna designs that use
kitchen pots and pans as the reflectors.

Jerry

2872. Re: KB9RQZ posts his bio

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 18:19:51 UTC
From: kb9rqz <kornstains@hotmail.com>
Message-ID: <4724c6e9$0$26475$88260bb3@free.teranews.com>
Source record: 34904
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna,soc.men

"an old fiend" <kb9queer@puncegotcha.com> wrote in message news:...
>
>
>
> Gavrielah Hojnacki" <gav@he-she.com> wrote in message
>
> 1) I was draft into the US Army.
> 2) I is a member of the Chemcal Cops
> 3) The military wont let me retire.
> 4) I dosn't serve under the name 'Mark Morgan but that's okay cuz theFBI,
> DOD, and CIA have al todl me I candodit.
> 5) I is on-the-lam from stalking former marines and fatal
> atraction four ex-shemale wife almoney
> 6) I was recenty, paying $5/hr. to acess my ISP
> 7) I has a 248 IQ, but cant figre out how touse a spel checker.
> 8) I is a bi-sexual Pagan male ham who like to be spanked.
> 9) I can't find any action on the military base in Central IL, so I hav to
> ask the peple on th USNET.
> http://www.marksspamblog.blogspot.com/
> 10) I punce gotcha
>
You have been fooled and hoodwinked into to follow the trail breadcrumbs of
a gruop of vile net stalkers I welcome to this site recovered largely as
result of that rotteneighboor.com posting just gott this sit back uner my
control you will soon find find link two my other blog that explore bisexal
ham radio and the peoples in it.

http://ipunce.blogspot.com/index.html

Shalom

Shalom

--
Posted via a free Usenet account from http://www.teranews.com

2873. get kelp

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 18:25:49 UTC
From: kb9rqz@hotmail.com
Message-ID: <21l9i3dgu75m5rqr4e44d77upg822qcf6v@4ax.com>
Source record: 34905
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna,soc.men

On Sun, 28 Oct 2007 14:19:51 -0400, "kb9rqz" <kornstains@hotmail.com>
wrote:

>

fake

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but google

posts from these sorucees are fakes
but till at least terranews is back running well I might use anyserver that comes to hand

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

2874. Re: Is Texas Radio Products still making Bugcatchers?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 18:43:01 UTC
From: "Damn Ham"@yahoo.com
Message-ID: <m0m9i3lijf89o9c3mcmqarqp6gvhh5r6te@4ax.com>
Source record: 34906

No, that is a different company founded by Henry Allen. Henry also
makes fine antennas!

On 28 Oct 2007 16:59:54 GMT, Ed G <Huckleberry_REMOVE_@bigvalley.net>
wrote:

>
>
>> I bought one a number of years ago, and it still works great. I was
>> wondering if he is still around and making them.
>>
>
> Seems to be a different company now.... Maybe the original company
>sold out?
>
> http://www.texasbugcatcher.com
>
>
> Ed K7AAT

2875. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 19:18:55 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <4724e0b2$0$16488$4c368faf@roadrunner.com>
Source record: 34907

"Art Clemons" <n8blk@aolSPAM.com> wrote in message
news:6aCdnYF5P-koxbzanZ2dnUVZ_t3inZ2d@comcast.com...
>I almost could not believe that an article that starts out with using an
> antenna tuner to deliver all possible power to mobile HF antennas got
> published.

I dont see anything wrong with that, normalizing the input impedance is
pretty much standard for comparing antennas.

Jimmie

2876. Re: Dumb antenna height question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 19:38:02 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <HNGdncQi99mWeLnanZ2dnUVZ_oWdnZ2d@comcast.com>
Source record: 34908

"merlin-7" <merlin-7@sc.rr.com> wrote in message
news:47237d87$0$4998$4c368faf@roadrunner.com...
> I know the 1/4 wave height rule but I am a bit confused so maybe someone
> can help me out here.
>
> I have been using a parallel, 3 wire, inverted V with its feed point at
> 40
> feet with good results.
>
> I will be changing my home QTH as soon as my current home sells and will
> need to erect another tower.
>
> My question is, what can I expect to happen if I placed the same antenna
> with its feed point at 50 feet? 60 feet?
>
Basically, as you put the antenna higher up you will get more energy at low radiation angles. This might be good, and it might not.

I used to have a Mosley TA33Jr at 38 feet; I then put up a 20 meter dipole at 55 feet. First comparison was with a station about 1000 miles away, broadside to the dipole. He preferred the TA33 by a small amount. Next came a G station some 3000 miles away, who definitely preferred the dipole. Stations in eastern Europe were up to 2 S units better on the dipole.

Tam/WB2TT

2877. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 19:44:21 UTC
From: charlie <wehatespam@wymsey.co.uk>
Message-ID: <j4-dndNYU_Pje7nanZ2dneKdnZydnZ2d@pipex.net>
Source record: 34910

Owen Duffy wrote:

<SNIP>

>
> You didn't mention the balun, it is significant.
>
> Owen

I can't comment on that as I did not make any measurements without a balun. It was always going to have a balun because I did not want any significant RF coming down the outside of the coax and causing interference.

It would be a simple matter for Jim to make a balun like mine and I imagine he'd get very similar results.

Charlie.

--
M0WYM
www.radiowymsey.org

2878. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 19:47:33 UTC
From: charlie <wehatespam@wymsey.co.uk>
Message-ID: <j4-dndJYU_OgernanZ2dneKdnZydnZ2d@pipex.net>
Source record: 34911

Cecil Moore wrote:
<SNIP>
>
> So you don't even believe in ohm's law and the
> principle of conservation of energy?

I can only say that Ohms law has worked correctly so far :)

Charlie.

--
M0WYM
www.radiowymsey.org

2879. question about wire antenna and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 19:50:38 UTC
From: James Barrett <xucaen@comcast.net>
Message-ID: <Z42dnXdMWoZLernanZ2dnUVZ_oSnnZ2d@comcast.com>
Source record: 34912

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Hi, I am learning about antennas, and and wondering about how antenna
tuners work. I've read you can use anything as an antenna as long as you
have a tuner. Well, If I put up a wire dipole, and then use a tuner,
what is the best length of wire to use? If I use an 80 meter dipole with
a tuner, is that better than using a 10 meter dipole with a tuner?

Jim
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.4.6 (GNU/Linux)

iD8DBQFHJOgNQuDJiZ/QrH0RAgwkAJ0YsAUjdGiU2Ln3vO4dg9V+plQW+wCgld5t
9kJoexKmCI9jv9qjJpYL1MI=
=2b04
-----END PGP SIGNATURE-----
```

2880. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 19:57:21 UTC
From: charlie <wehatespam@wymsey.co.uk>
Message-ID: <j4-dnc1YU_MXdLnanZ2dneKdnZydnZ2d@pipex.net>
Source record: 34913

Art Clemons wrote:
<SNIP>
>
>
> Roy seems to be using T'Bird which if I remember correctly defaults to 72
> characters per line. Roy's post showed up fine in Knode here too.

Yes, I noticed later that he was using TB in which my default is 68
but 72 would do :) Maybe Knode automatically wraps the lines?

Charlie.

--
M0WYM
www.radiowymsey.org

2881. Re: question about wire antenna and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 20:03:35 UTC
From: JERD <jedunk@REMOVEbigpond.net.au>
Message-ID: <rW5Vi.6242$CN4.2322@news-server.bigpond.net.au>
Source record: 34914

"James Barrett" <xucaen@comcast.net> wrote in message
news:Z42dnXdMWoZLernanZ2dnUVZ_oSnnZ2d@comcast.com...
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> Hi, I am learning about antennas, and and wondering about how antenna
> tuners work. I've read you can use anything as an antenna as long as you
> have a tuner. Well, If I put up a wire dipole, and then use a tuner,
> what is the best length of wire to use? If I use an 80 meter dipole with
> a tuner, is that better than using a 10 meter dipole with a tuner?
>

Google Antenna tuners

JERD

2882. Re: question about wire antenna and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 20:11:00 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <s16Vi.27065$oC3.1587@newsfe08.phx>
Source record: 34915

"JERD" <jedunk@REMOVEbigpond.net.au> wrote in message
news:rW5Vi.6242$CN4.2322@news-server.bigpond.net.au...
>
> "James Barrett" <xucaen@comcast.net> wrote in message
> news:Z42dnXdMWoZLernanZ2dnUVZ_oSnnZ2d@comcast.com...
>> -----BEGIN PGP SIGNED MESSAGE-----
>> Hash: SHA1
>>
>> Hi, I am learning about antennas, and and wondering about how antenna
>> tuners work. I've read you can use anything as an antenna as long as you
>> have a tuner. Well, If I put up a wire dipole, and then use a tuner,
>> what is the best length of wire to use? If I use an 80 meter dipole with
>> a tuner, is that better than using a 10 meter dipole with a tuner?
>>
>
> Google Antenna tuners
>
> JERD
>

http://www.arrl.org/tis/info/Ant-tuner-op.html

http://www.hamuniverse.com/tuner.html

Lamont

2883. Re: interference antenna help

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 20:35:56 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <74ednVGzhd-2e7nanZ2dnUVZ_s2tnZ2d@giganews.com>
Source record: 34909

ml wrote:
> hi
>
> I've been getting alot of interference lately mostly 1-24mhz.
>
> was thinking about using my 817 to snoop around the block to see where
> it might be comming from
>
>
> was wondering if anyone has detailed construction instructions on what
> type of antenna i could easily build
>
> i presume a loop but unsure of how big /how many turns and best way
> to mate it w/the coax feed as i'd need to connect it via a length of
> rg58 to the rig
>
>
> any tips would be greatly appreciated the noise is like s9
>
>
>
>
> ml

I'd build a tuned loop, similar to what AM broadcast dx-ers use. A loop is resonated with a capacitor and coupled into the feedline via a pickup loop. The larger the diameter the tuned loop, the more signal you'll capture. By using a loosely-coupled pickup loop of comparatively few turns, you'll preserve the Q of the tuned loop. This worked well for me on 75m... my loop was about 24" diameter & resonated w/ a 2-section 365pF air variable capacitor.
Rather than seeing a peak in response, you'll see deep nulls in 2 directions. Triangulating on the nulls will pinpoint the location(s) of the noise.

Bryan WA7PRC

2884. Re: Dumb antenna height question

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 21:27:24 UTC
From: merlin-7 <merlin-7@sc.rr.com>
Message-ID: <4724ff4a$0$26341$4c368faf@roadrunner.com>
Source record: 34916

I have a good idea of what EZNEC will show.
What I am looking for Is someone that has raised an antenna from one height to one higher, so I know what to expect as far as noise levels, QSM mostly.
I just want to know what to look for when I raise my antenna in an effort to head off any problems.
I have had really good results with my antenna's feed point at 40 feet but its a bit of a cloud warmer. 60 feet high looks a lot better on paper but I do not know what to expect as far as noise.
Balancing my budget is the hardest part.

The higher you go, the more lightning protection you need, plus more guy wires, etc.

I am trying to figure out the best height I can achive within my budget that has the best results.

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:5LRUi.1284$%Y6.471@nlpi061.nbdc.sbc.com...
> merlin-7 wrote:
> > My question is, what can I expect to happen if I placed the same
antenna
> > with its feed point at 50 feet? 60 feet?
>
> The free demo version of EZNEC will tell you.
> --
> 73, Cecil http://www.w5dxp.com

2885. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 21:48:55 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <472503c9$0$25659$4c368faf@roadrunner.com>
Source record: 34917

"art" <aunwin@insightbb.com> wrote in message
news:1193578516.614968.58340@o80g2000hse.googlegroups.com...
> On 28 Oct, 02:46, "Stefan Wolfe" <ste...@eml.com> wrote:
>> "art" <aun...@insightbb.com> wrote in message
>> news:1193540797.556158.313080@
>>
>> >> Think of a photon being emitted instead of an electron.
>>
>> > Can't do that Cecil. I see radiation as an electron being blasted away
>> > from the area that it was at rest with some electrons that are
>> > blasted of but prevented from leaving the immediate vicinity or
>> > equilibrium boundary returning to the host material. I cannot see
>> > what a photon would add to this scenario since the released electrons
>> > have the energy accorded to it by inductive energy instantaneous
>> > energy.
>> > I see no way how to include another energy packet to enhance this
>> > energy exchange
>> > i.e. blast that overcomes the electron inertia such that it escapes
>>
>> The electron does not get "blasted" away. It merely goes to a higher
>> energy
>> level. Then when it returns to a lower energy level, the difference in
>> energy is emitted as a photon. The electron does not physically separate
>> from the atom of the antenna conductor material and radiate into free
>> space,
>> only the photonic energy is emitted . This all occurs at a frequency that
>> depends on the tuning of the RF circuit. The antenna conductor should be
>> geometrically sized to support the frequency of the emssions for maximum
>> radiation efficiency. Now, since the emission of photons is also an EM
>> wave
>> emission, the energy emitted has both an electrical and magnetic
>> compoment
>> associated with it. The energy has been converted from the "work" to
>> simply
>> move coulombs (electrons) over a potential voltage difference to "work"
>> needed to radiate photons (waves) into free space. Work is work and it
>> remains the same; what the work accomplishes is different. This part I
>> cannot explain very well since I have no idea how RF freqeuncy, or light
>> or
>> other EM waves can be of both a wave nature and particle (photon) nature,
>> but it is, and that is how the energy conversion works. The dual particle
>> natuire and wave nature of RF/light would almost appear to be "faith
>> based"
>> if it weren't for the large body of mathematics and other physics

>> evidence
>> that supports it.
>
> Look, I happen to not fully disagree to what you and Cecil are saying.
> An electron can be an active part of a substance indynamic form in
> orbit around an atom.
> You can also have a static form of electron which is at rest.
> For radiation I am referring to the dislodfgement of a static
> electron.
> On the other hand I believe you are referring to a dynamic electron
> in
> orbit which constitutes part of that of which we see as a mass.

Hello Art, there are forms of radiation that involves the motion of free electrons. One type is the mu-meson or "cosmic ray" which, by the way, is more of a clump of electrons that travels at a rather high velocity, about 0.9c. There are beta rays (created in the betatron which was invented at my beloved University of Wisconsin). But to make loose electrons travel in free space at any appreciable velocity requires a tremendous amount of energy, certainly not enough provided by your linear amp, which on the other hand does have more than enough energy to create photons that travel at c. Also, electrons travelling as "rays" in free space are neither wavelike nor do they compose the dual electric amd magnetic fields associated with RF. So, with all due respect, I think you should reconsider the model you are using. I do not have all of the answers but suffice it to say that the type of RF we are discussing is comprised of photons, generated by the excitation and deterioration of electrons from higher energy orbitals to lower energy oribitals in the metal atoms of your antenna conductor material.

2886. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 21:52:13 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13ia14hbsbdc035@corp.supernews.com>
Source record: 34918

John Ferrell wrote:
> . . .
> Modeling programs do not consider the radiation from the loading coils
> but field measurements do.
> . . .

Modeling programs do indeed include radiation from the loading coils, provided that they're modeled as a wire helix rather than by use of the lumped load object. EZNEC and NEC both have methods of automatically creating a helix, making this process very easy. I believe most other NEC based modeling programs also have this capability.

Roy Lewallen, W7EL

2887. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 22:03:22 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <KG7Vi.292020$ax1.283407@bgtnsc05-news.ops.worldnet.att.net>
Source record: 34919

Cecil Moore wrote:
> Gene Fuller wrote:
>> That's a good one. I did not know that a transmission line is "free
>> space".
>
> It doesn't matter what the medium is - EM waves
> obey the conservation of momentum principle in
> any medium. Your "sloshing" waves violate that
> accepted principle of physics. Sorry.

Cecil,

This entire thread is silly beyond belief. In any case, no matter how irrelevant, there is no problem at all in balancing momentum when there is lots of stuff around. Momentum is a completely useless concept in this example.

But I will declare you to be the winner. 8-)

73,
Gene
W4SZ

2888. FA: S/A 1711 rcvr, 1586 xtal/bolo amp, 1580 recorder

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 22:28:12 UTC
From: Mike
Message-ID: <aa8Vi.2477$%Z2.892@nlpi068.nbdc.sbc.com>
Source record: 34920

If your in the antenna measurement business you probably already have one. Get a spare cheap, see Ebay item # 170163672910.

2889. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 22:49:17 UTC
From: kb9rqz@hotmail.com
Message-ID: <2f4ai3h4srp72mgb6f8dl1aad7bbmpm1o7@4ax.com>
Source record: 34921
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS
still bearing repeating

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but google

posts from these sorucees are fakes
but till at least terranews is back running well I might use anyserver that comes to hand

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

2890. Re: question about wire antenna and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 23:49:34 UTC
From: James Barrett <xucaen@comcast.net>
Message-ID: <br2dnYxwCpVEgrjanZ2dnUVZ_tOtnZ2d@comcast.com>
Source record: 34922

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

JERD wrote:
> "James Barrett" <xucaen@comcast.net> wrote in message
> news:Z42dnXdMWoZLernanZ2dnUVZ_oSnnZ2d@comcast.com...
>> -----BEGIN PGP SIGNED MESSAGE-----
>> Hash: SHA1
>>
>> Hi, I am learning about antennas, and and wondering about how antenna
>> tuners work. I've read you can use anything as an antenna as long as you
>> have a tuner. Well, If I put up a wire dipole, and then use a tuner,
>> what is the best length of wire to use? If I use an 80 meter dipole with
>> a tuner, is that better than using a 10 meter dipole with a tuner?
>>
>
> Google Antenna tuners
>
> JERD
>
>

I honestly did not think of that. I googled for different variations of
"antenna". I found a web site hamuniverse, and found a very good
description of how an antenna tuner works. So a tuner is really there to
protect the transmitter. You still need the wire cut to frequency if you
want to maximize efficiency and minimize the SWR in the wire. Of course
I am generalizing here. I need the arrl antennabook. ;-)

http://www.hamuniverse.com/tuner.html

Thanks!!

Jim

-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.4.6 (GNU/Linux)

iD8DBQFHJSANQuDJiZ/QrH0RAupRAJ9IR5ZH1Qrsv6ljeDsEYl9aY8GeKwCggdeq
oso2pejHbX7wbeTjOl79QBw=
=U0U1
-----END PGP SIGNATURE-----
```

2891. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 23:49:37 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <le9Vi.12765$4V6.2828@newssvr14.news.prodigy.net>
Source record: 34923

John Ferrell wrote:
> I think an auto tuner with whatever whip length one can tolerate is
> the best one can do with a Chrysler Minivan.

That will work pretty well for 20m-10m.

> Modeling programs do not consider the radiation from the loading coils
> but field measurements do.

EZNEC can model helical coils that does consider
radiation from the coil.
--
73, Cecil http://www.w5dxp.com

2892. Re: my SWR reading

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-28 23:55:58 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <ik9Vi.12766$4V6.6053@newssvr14.news.prodigy.net>
Source record: 34924

Gene Fuller wrote:
> Momentum is a completely useless concept in this example.

Obviously useless for your side of the argument. :-)
--
73, Cecil http://www.w5dxp.com

2893. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 00:08:29 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <0w9Vi.2478$%Z2.128@nlpi068.nbdc.sbc.com>
Source record: 34925

art wrote:
> I haven't had a chance to read Feynman as yet unless it is hidden
> somewhere on the net. Is it possible he is in error regarding photons
> as something separate from electrons in flight?

A little logic should prove that electrons don't
leave the antenna. Assume that electrons radiate
from the antenna. If so, they would have to be
replaced. Replacing electrons would require a
DC current conponent imposed upon the RF. Does a
DC component exist? Don't most transmitters block
DC from reaching the antenna?
--
73, Cecil http://www.w5dxp.com

2894. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 00:09:35 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193616575.756033.287980@v3g2000hsg.googlegroups.com>
Source record: 34926

On 28 Oct, 14:48, "Stefan Wolfe" <ste...@eml.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1193578516.614968.58340@o80g2000hse.googlegroups.com...
>
>
>
>
>
> > On 28 Oct, 02:46, "Stefan Wolfe" <ste...@eml.com> wrote:
> >> "art" <aun...@insightbb.com> wrote in message
> >> news:1193540797.556158.313080@
>
> >> >> Think of a photon being emitted instead of an electron.
>
> >> > Can't do that Cecil. I see radiation as an electron being blasted away
> >> > from the area that it was at rest with some electrons that are
> >> > blasted of but prevented from leaving the immediate vicinity or
> >> > equilibrium boundary returning to the host material. I cannot see
> >> > what a photon would add to this scenario since the released electrons
> >> > have the energy accorded to it by inductive energy instantaneous
> >> > energy.
> >> > I see no way how to include another energy packet to enhance this
> >> > energy exchange
> >> > i.e. blast that overcomes the electron inertia such that it escapes
>
> >> The electron does not get "blasted" away. It merely goes to a higher
> >> energy
> >> level. Then when it returns to a lower energy level, the difference in
> >> energy is emitted as a photon. The electron does not physically separate
> >> from the atom of the antenna conductor material and radiate into free
> >> space,
> >> only the photonic energy is emitted . This all occurs at a frequency that
> >> depends on the tuning of the RF circuit. The antenna conductor should be
> >> geometrically sized to support the frequency of the emssions for maximum
> >> radiation efficiency. Now, since the emission of photons is also an EM
> >> wave
> >> emission, the energy emitted has both an electrical and magnetic
> >> compoment
> >> associated with it. The energy has been converted from the "work" to
> >> simply
> >> move coulombs (electrons) over a potential voltage difference to "work"
> >> needed to radiate photons (waves) into free space. Work is work and it
> >> remains the same; what the work accomplishes is different. This part I

> >> cannot explain very well since I have no idea how RF freqeuncy, or light
> >> or
> >> other EM waves can be of both a wave nature and particle (photon) nature,
> >> but it is, and that is how the energy conversion works. The dual particle
> >> natuire and wave nature of RF/light would almost appear to be "faith
> >> based"
> >> if it weren't for the large body of mathematics and other physics
> >> evidence
> >> that supports it.
>
> > Look, I happen to not fully disagree to what you and Cecil are saying.
> > An electron can be an active part of a substance indynamic form in
> > orbit around an atom.
> > You can also have a static form of electron which is at rest.
> > For radiation I am referring to the dislodfgement of a static
> > electron.
> > On the other hand I believe you are referring to a dynamic electron
> > in
> > orbit which constitutes part of that of which we see as a mass.
>
> Hello Art, there are forms of radiation that involves the motion of free
> electrons. One type is the mu-meson or "cosmic ray" which, by the way, is
> more of a clump of electrons that travels at a rather high velocity, about
> 0.9c. There are beta rays (created in the betatron which was invented at my
> beloved University of Wisconsin). But to make loose electrons travel in free
> space at any appreciable velocity requires a tremendous amount of energy,

Where is the information that backs that statement as I need to check
that out?
A static particle (an electron) sits on a diagmatic surface with a
chemical stickynes.
All it takes to dislodge that particle from the surface is the amount
of energy
required to lift up one edge where its inertia is overcome. Thus the
energy to
propel that static particle appears to be minimul at best. When the
energy container of
inductance is released instantaneously then the applied voltage is
extremely high
and easily removes the static particle from the surface.
The above is a lot different from removing a dynamic electron in orbit
around a atom
which requires a tremendous force.
Again, please show me where you get your evidence of a "large" amount
of energy.
I would also add that a dynamic electron may well produce protons but
for a
static particle to produce a photon is just not on the cards as it has
minimul
to zero contained energy.

Art Unwin KB9MZ....XG

snip

2895. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 00:12:55 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <bA9Vi.12767$4V6.4031@newssvr14.news.prodigy.net>
Source record: 34927

Stefan Wolfe wrote:
> RF can be expressed in terms of both waves and particles ...

Maybe it is neither until its probability
function collapses during a measurement?
--
73, Cecil http://www.w5dxp.com

2896. Re: question about wire antenna and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 00:23:06 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <KJ9Vi.2479$%Z2.173@nlpi068.nbdc.sbc.com>
Source record: 34928

James Barrett wrote:
> So a tuner is really there to protect the transmitter.

It does that by not allowing reflected energy to
reach the transmitter and redistributing the
reflected energy back toward the antenna as
part of the forward wave. Thus a transmitter can
be sourcing 100 watts while the forward power
on the transmission line is 200 watts.

> You still need the wire cut to frequency if you
> want to maximize efficiency and minimize the SWR in the wire.

Efficiency can also be maximized by choosing a
near-lossless transmission line. In that case,
SWR doesn't necessarily need to be minimized.
--
73, Cecil http://www.w5dxp.com

2897. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 00:27:13 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <AN9Vi.2480$%Z2.1915@nlpi068.nbdc.sbc.com>
Source record: 34929

art wrote:
> Where is the information that backs that statement as I need to check
> that out?

Isn't it obvious that since RF waves travel at the speed
of light and it is impossible for an electron to travel
at the speed of light, that RF waves are made up of
something other than electrons?
--
73, Cecil http://www.w5dxp.com

2898. Re: Is Texas Radio Products still making Bugcatchers?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 00:51:34 UTC
From: Ed G <Huckleberry_REMOVE_@bigvalley.net>
Message-ID: <Xns99D7B5AFF5914HuckleberryREMOVEbig@198.186.192.196>
Source record: 34930

>>
>>> I bought one a number of years ago, and it still works great. I was
>>> wondering if he is still around and making them.
>>>
>>
>> Seems to be a different company now.... Maybe the original company
>>sold out?
>>
>> http://www.texasbugcatcher.com
>>

> No, that is a different company founded by Henry Allen. Henry also
> makes fine antennas!
>

Then I am a little surprised. I would have thought the original
"Texas Bugcatcher" antenna name would have been copyrighted, and Henry
would be infringing on that name with his website........

Ed

2899. Cushcraft R5/R7 Matching Network (MN-7) Rebuild

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 01:19:36 UTC
From: gb <w9nogbspam@arrlspamno.net>
Message-ID: <z6mdnZ68Aay0qLjanZ2dnUVZ_hmtnZ2d@comcast.com>
Source record: 34931

This article describes how to rebuild a matching unit of a Cushcraft R5
vertical -- by --G0WCW

http://www.mrs.bt.co.uk/mrs/r5/

Nice work!
http://www.mrs.bt.co.uk/mrs/r5/DSCN2478.JPG
Enclosure

The box is from maplin, product number YM91Y and is one of their 'IP
enclosure' range. The box is 150 x 110 x 70mm in size (product codes YM91Y -
grey, YM93B - grey with clear lid). Cost is around six UK pounds.

It is physically the same size as the Cushcraft variant, but the PCB has
to be slightly 'nibbled' at the corners to get it to fit inside the newer
box. I'd say the original Cushcraft enclosure isn't that good as they used
steel screws into brass fixings. The screws rust over and then shear off. In
my view, the Maplin IP enclosure is a better solution to outdoor use (IP56
rated).

2900. Re: question about wire antenna and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 01:54:19 UTC
From: Tam/WB2TT <t-tammaru@c0mca$t.net>
Message-ID: <G5OdnV0IAKDWoLjanZ2dnUVZ_qqgnZ2d@comcast.com>
Source record: 34932

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:KJ9Vi.2479$%Z2.173@nlpi068.nbdc.sbc.com...
> James Barrett wrote:
>> So a tuner is really there to protect the transmitter.
>
> It does that by not allowing reflected energy to
> reach the transmitter and redistributing the
> reflected energy back toward the antenna as
> part of the forward wave. Thus a transmitter can
> be sourcing 100 watts while the forward power
> on the transmission line is 200 watts.
>
What it really is is an impedance matching network. You adjust the antenna tuner so that the transmitter sees 50 Ohms. If your SWR meter is calibrated for 50 Ohms, that means an SWR of 1:1 (between the tuner and the radio).

>> You still need the wire cut to frequency if you
>> want to maximize efficiency and minimize the SWR in the wire.
>
> Efficiency can also be maximized by choosing a
> near-lossless transmission line. In that case,
> SWR doesn't necessarily need to be minimized.
> --
You mean the SWR doesn't have to be minimized on the transmission line. If you don't have a tuner and run a 600 Ohm transmission line into the transmitter, it will be happy at an SWR of 12:1 if the impedance the transmitter sees is 50 Ohms. On the other hand, with 600 Ohm line, and an SWR of 1:1 the transmitter will barf.

The longer wire is usually better than the short. Also, the ARRL recommends a length that is not resonant on any band to make the job of the antenna tuner easier. Wires around 100 feet are often used.

Tam/WB2TT

> 73, Cecil http://www.w5dxp.com

2901. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 02:06:25 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <47254020$0$32520$4c368faf@roadrunner.com>
Source record: 34933

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:bA9Vi.12767$4V6.4031@newssvr14.news.prodigy.net...
> Stefan Wolfe wrote:
>> RF can be expressed in terms of both waves and particles ...
>
> Maybe it is neither until its probability
> function collapses during a measurement?

Some experiments like the photoelectric effect leads one to conclude that light must be a particle since the intensity of ejected electrons is only dependent on frequency and is completely independent of amplitude. On the other hand it seems that polarization of the same light source can only be explained by a wave characteristic (otherwise one would have to accept that the polarizing material somehow changed the probablility of the particle-photons to not occur in the polarized dimension). I guess you're right; either one of these experiments can mislead the observer as to the true nature of what is being observed. This is where I plateau in terms of physics comprehension; I am not able to tell the difference between a wave and a particle, understanding as well that there may be none.

2902. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 02:23:52 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193624632.889155.261350@57g2000hsv.googlegroups.com>
Source record: 34934

On 28 Oct, 17:27, Cecil Moore <nos...@w5dxp.com> wrote:
> art wrote:
> > Where is the information that backs that statement as I need to check
> > that out?
>
> Isn't it obvious that since RF waves travel at the speed
> of light and it is impossible for an electron to travel
> at the speed of light, that RF waves are made up of
> something other than electrons?
> --
> 73, Cecil http://www.w5dxp.com

We may be getting confused with nomenclature here.
I think most people have had to brush off from their clothing
electrostatic
particles. So I will call it a static particle without reference to an
electron.
That static particle can rest on a diagmatic material asd copper and
aluminum,
gold, silver etc is in that class. It is also this class of material
that
is used for antennas no less!
So static particles are allowed to rest on an antenna.
Now a antenna is a tank circuit where the distributed constants of
inductance
and capacitance are energy storage containers. Now is that hard to
understand?
And the L,C ratio to each other is very much a constant in antenna
mathematics.
Do we have anything else? Yes we have resistance. All in all just
three
distributed components
With a tank curcuit the energy containers release their energy in
pulsatic
form just like the voltage on the Tesla coil .
In the case of a radiator a spark is not produced as the power goes to
the
capacitor which later on will release its stored power which goes
back to
the inductance.
Now if resistance is not present then we would have a loss less system
right?
Unfortunately there is a litle resistance present but it will act for
some

time in pendulum style using very little energy.
When a pulse of energy is released down stream to the other end any static
particles will be projected away from the surface where it acts as a radio
communication carrier.
So call this static partical at rest on the radiator surface what you want
it certainly does not produce a photon.
As there is no explanation available as to what radiation is I am content to
stay
with what I have deduced from adding a time variAnce to Gauss's static law
encompassed by an arbitary field which conformes with Maxwells laws as used
to determine characteristics of a radiator via computor programs now in existance.
Now getting back to electrons static forms ofcourse, what a coincidence that we
make our antennas od a diagmatic material which by chance or coincidence or
luck of the draw is the only type of material that will allow a accumullation
of static particles upon its surface.
Now there are sonme other materials which will allow a small amount of static
accumulation on the surface such as some types of steel e.t.c which make
poor radiators.
Why? Because they are not fully populated with static particles or what some
call free electons.
Now this explanation fits very well together so I consider it a suitable
explanation of radiation in the absence of any other explanation.
FIND FAULT WITH IT IF YOU CAN AND LET ME KNOW SO I CAN AMMEND IT.
Good luck and best regards
Art Unwin KB9MZ.......xg

2903. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 02:49:51 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <47254a48$0$32525$4c368faf@roadrunner.com>
Source record: 34935

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:13ia14hbsbdc035@corp.supernews.com...
> John Ferrell wrote:
>> . . .
>> Modeling programs do not consider the radiation from the loading coils
>> but field measurements do. . . .
>
> Modeling programs do indeed include radiation from the loading coils,
> provided that they're modeled as a wire helix rather than by use of the
> lumped load object. EZNEC and NEC both have methods of automatically
> creating a helix, making this process very easy. I believe most other NEC
> based modeling programs also have this capability.
>
> Roy Lewallen, W7EL

I once saw a demonstration that "BIG UGLY" cb antennas, these are approximately 1/8 wl and have a huge loading coil, have more gain than a 1/4 wl radiator. This certaily appeared to be the case when both the antenna being test and the field strength meter's antenna were both the "big ugly" variety and relatively close together(50'). Could this "gain" be a result of magnetic coupling between the coils or was some other trickery being performed.

Jimmie

2904. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 02:51:03 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <47254a91$0$19580$4c368faf@roadrunner.com>
Source record: 34936

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:KKpUi.542$yV6.341@newssvr25.news.prodigy.net...
> This thread is started to allow anyone who believes
> in "waves of average power" to say so and explain
> why they believe such.
> --
> 73, Cecil http://www.w5dxp.com

Couldnt that be considered an oxymoron.

2905. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 02:56:27 UTC
From: John Ferrell <johnferrell@sprintmail.com>
Message-ID: <qgiai35m0vqdh9e71llpvvs629hpdkb9ca@4ax.com>
Source record: 34937

On Sun, 28 Oct 2007 14:52:13 -0700, Roy Lewallen <w7el@eznec.com>
wrote:

>John Ferrell wrote:
>> . . .
>> Modeling programs do not consider the radiation from the loading coils
>> but field measurements do.
>> . . .
>
>Modeling programs do indeed include radiation from the loading coils,
>provided that they're modeled as a wire helix rather than by use of the
>lumped load object. EZNEC and NEC both have methods of automatically
>creating a helix, making this process very easy. I believe most other
>NEC based modeling programs also have this capability.
>
>Roy Lewallen, W7EL
Ooops! I have not used that part of EZNEC yet so I accept I was wrong.
I will have to look a little deeper into why I was convinced that the
radiation from loading coils was not considered.

I still don't find a problem with publishing the article. If nothing
else it has generated discussion.

John Ferrell W8CCW
"Life is easier if you learn to
plow around the stumps"

2906. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 02:59:34 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <47254c93$0$24278$4c368faf@roadrunner.com>
Source record: 34938

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:0w9Vi.2478$%Z2.128@nlpi068.nbdc.sbc.com...
> art wrote:
>> I haven't had a chance to read Feynman as yet unless it is hidden
>> somewhere on the net. Is it possible he is in error regarding photons
>> as something separate from electrons in flight?
>
> A little logic should prove that electrons don't
> leave the antenna. Assume that electrons radiate
> from the antenna. If so, they would have to be
> replaced. Replacing electrons would require a
> *DC current conponent* imposed upon the RF. Does a
> DC component exist? Don't most transmitters block
> DC from reaching the antenna?
> --
> 73, Cecil http://www.w5dxp.com

If Art was correct you could generate RF just by passing DC through a 1
wavelength loop.
Gee wouldnt that make building a transmitter easy.

Jimmie

2907. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 03:03:04 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <47254d6a$0$26360$4c368faf@roadrunner.com>
Source record: 34939

"art" <aunwin@insightbb.com> wrote in message
news:1193624632.889155.261350@57g2000hsv.googlegroups.com...
> On 28 Oct, 17:27, Cecil Moore <nos...@w5dxp.com> wrote:
>> art wrote:
>> > Where is the information that backs that statement as I need to check
>> > that out?
>>
>> Isn't it obvious that since RF waves travel at the speed
>> of light and it is impossible for an electron to travel
>> at the speed of light, that RF waves are made up of
>> something other than electrons?
>> --
>> 73, Cecil http://www.w5dxp.com
>
> We may be getting confused with nomenclature here.
> I think most people have had to brush off from their clothing
> electrostatic
> particles. So I will call it a static particle without reference to an
> electron.
> That static particle can rest on a diagmatic material asd copper and
> aluminum,
> gold, silver etc is in that class. It is also this class of material
> that
> is used for antennas no less!
> So static particles are allowed to rest on an antenna.
> Now a antenna is a tank circuit where the distributed constants of
> inductance
> and capacitance are energy storage containers. Now is that hard to
> understand?
> And the L,C ratio to each other is very much a constant in antenna
> mathematics.
> Do we have anything else? Yes we have resistance. All in all just
> three
> distributed components
> With a tank curcuit the energy containers release their energy in
> pulsatic
> form just like the voltage on the Tesla coil .
> In the case of a radiator a spark is not produced as the power goes to
> the
> capacitor which later on will release its stored power which goes
> back to
> the inductance.
> Now if resistance is not present then we would have a loss less system
> right?

> Unfortunately there is a litle resistance present but it will act for
> some
> time in pendulum style using very little energy.
> When a pulse of energy is released down stream to the other end any
> static
> particles will be projected away from the surface where it acts as a
> radio
> communication carrier.
> So call this static partical at rest on the radiator surface what you
> want
> it certainly does not produce a photon.
> As there is no explanation available as to what radiation is I am
> content to
> stay
> with what I have deduced from adding a time variAnce to Gauss's static
> law
> encompassed by an arbitary field which conformes with Maxwells laws as
> used
> to determine characteristics of a radiator via computor programs now
> in existance.
> Now getting back to electrons static forms ofcourse, what a
> coincidence that we
> make our antennas od a diagmatic material which by chance or
> coincidence or
> luck of the draw is the only type of material that will allow a
> accumullation
> of static particles upon its surface.
> Now there are sonme other materials which will allow a small amount of
> static
> accumulation on the surface such as some types of steel e.t.c which
> make
> poor radiators.
> Why? Because they are not fully populated with static particles or
> what some
> call free electons.
> Now this explanation fits very well together so I consider it a
> suitable
> explanation of radiation in the absence of any other explanation.
> FIND FAULT WITH IT IF YOU CAN AND LET ME KNOW SO I CAN AMMEND IT.
> Good luck and best regards
> Art Unwin KB9MZ.......xg

There are several faults but let me mention just one: You explain that a static charge can exist on an antenna. In fact, that is true, especially in the presence of moving air that tends to add/strip electrons to the surface resulting in a net positive or negative static charge that can even damage your radio in mobile operation if measures are not taken (not sure if + or - but it doesn't make any difference). But all you have been referring to up to now is the electric E-field. What about the magnetic field (H-field) that is also present in the RF wave? With your radiating electrons theory you

attempt to cover the E-field in terms of static charges that are put into motion and projected from the antenna. If so, how does a loop antenna work? Do static magnets exist on the antenna surface also get put into motion and get projected outwards at exact right angles to the electrons? I have to add a smiley to this because I'm sure you know it is quite a preposterous assertion but I am seriously only trying to respectfully question your model. :-)

2908. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 04:22:10 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193631730.671954.155520@o38g2000hse.googlegroups.com>
Source record: 34940

On 28 Oct, 20:03, "Stefan Wolfe" <ste...@eml.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1193624632.889155.261350@57g2000hsv.googlegroups.com...
>
>
>
>
>
> > On 28 Oct, 17:27, Cecil Moore <nos...@w5dxp.com> wrote:
> >> art wrote:
> >> > Where is the information that backs that statement as I need to check
> >> > that out?
>
> >> Isn't it obvious that since RF waves travel at the speed
> >> of light and it is impossible for an electron to travel
> >> at the speed of light, that RF waves are made up of
> >> something other than electrons?
> >> --
> >> 73, Cecil http://www.w5dxp.com
>
> > We may be getting confused with nomenclature here.
> > I think most people have had to brush off from their clothing
> > electrostatic
> > particles. So I will call it a static particle without reference to an
> > electron.
> > That static particle can rest on a diagmatic material asd copper and
> > aluminum,
> > gold, silver etc is in that class. It is also this class of material
> > that
> > is used for antennas no less!
> > So static particles are allowed to rest on an antenna.
> > Now a antenna is a tank circuit where the distributed constants of
> > inductance
> > and capacitance are energy storage containers. Now is that hard to
> > understand?
> > And the L,C ratio to each other is very much a constant in antenna
> > mathematics.
> > Do we have anything else? Yes we have resistance. All in all just
> > three
> > distributed components
> > With a tank curcuit the energy containers release their energy in
> > pulsatic
> > form just like the voltage on the Tesla coil .

> > In the case of a radiator a spark is not produced as the power goes to
> > the
> > capacitor which later on will release its stored power which goes
> > back to
> > the inductance.
> > Now if resistance is not present then we would have a loss less system
> > right?
> > Unfortunately there is a litle resistance present but it will act for
> > some
> > time in pendulum style using very little energy.
> > When a pulse of energy is released down stream to the other end any
> > static
> > particles will be projected away from the surface where it acts as a
> > radio
> > communication carrier.
> > So call this static partical at rest on the radiator surface what you
> > want
> > it certainly does not produce a photon.
> > As there is no explanation available as to what radiation is I am
> > content to
> > stay
> > with what I have deduced from adding a time variAnce to Gauss's static
> > law
> > encompassed by an arbitary field which conformes with Maxwells laws as
> > used
> > to determine characteristics of a radiator via computor programs now
> > in existance.
> > Now getting back to electrons static forms ofcourse, what a
> > coincidence that we
> > make our antennas od a diagmatic material which by chance or
> > coincidence or
> > luck of the draw is the only type of material that will allow a
> > accumullation
> > of static particles upon its surface.
> > Now there are sonme other materials which will allow a small amount of
> > static
> > accumulation on the surface such as some types of steel e.t.c which
> > make
> > poor radiators.
> > Why? Because they are not fully populated with static particles or
> > what some
> > call free electons.
> > Now this explanation fits very well together so I consider it a
> > suitable
> > explanation of radiation in the absence of any other explanation.
> > FIND FAULT WITH IT IF YOU CAN AND LET ME KNOW SO I CAN AMMEND IT.
> > Good luck and best regards
> > Art Unwin KB9MZ.......xg
>
> There are several faults but let me mention just one: You explain that a

> static charge can exist on an antenna. In fact, that is true, especially in
> the presence of moving air that tends to add/strip electrons to the surface
> resulting in a net positive or negative static charge that can even damage
> your radio in mobile operation if measures are not taken (not sure if + or -
> but it doesn't make any difference). But all you have been referring to up
> to now is the electric E-field. What about the magnetic field (H-field) that
> is also present in the RF wave? With your radiating electrons theory you
> attempt to cover the E-field in terms of static charges that are put into
> motion and projected from the antenna. If so, how does a loop antenna work?
> Do static magnets exist on the antenna surface also get put into motion and
> get projected outwards at exact right angles to the electrons?

Well that is easy!
You can't have static magnetic particles resting on a diagmatic
material
since a diagmatic material is absent any form of hysterysis curve and
a static magnet(
what ever that may be) generates a hysterysis curve

I have to add
> a smiley to this because I'm sure you know it is quite a preposterous
> assertion but I am seriously only trying to respectfully question your
> model.

Don't mind the questions but don't write a book on it until you get a
response

Please take note that Maxwells equations verify this model
I suggest you look up in the archives my research on Gauss
since you are new to the group before you next want to invalidate
Maxwell!!
Regards
Art

:-)- Hide quoted text -
>
> - Show quoted text -

2909. Re: antenna reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 06:16:01 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <DUeVi.14124$xP1.11533@newsfe11.phx>
Source record: 34841

"a" <me@privacy.net> wrote in message
news:47245ae2_2@mk-nntp-2.news.uk.tiscali.com...
< snip >

> Thanks for the replies.
>
> I agree that the radiating element must be placed at the parabola focus
> to give minimal beamwidth, and that this condition is met when the
> radiating element is placed at the focus (which is given by D^2/16d).
>
> The point remains that I can still choose the parabola parameters to set
> the focal length to whatever is desired.
> Should I choose them so that the focal length is an odd or even number
> of quarter wavelengths?

I don't think it matters. The gain signal off the parabolic
reflector will be so very much stronger -- except for a small antenna. Do
you have the gain formulas? http://en.wikipedia.org/wiki/Parabolic_antenna

> What I really had in mind was a uniformly radiating element (ie a simple
> whip) with a parabolic reflector behind it, like this:-
> (x
> reflector radiating element
>
> To get the right-going signal from the reflector in phase with the
> right-going signal from the radiating element I need to choose the
> reflector distance correctly.

This is an unusual concern; it's not common practice to
have an "omni" feed for a parabolic.

> I have a feeling that there WILL be a phase inversion at the reflector
> but I'm not certain.
>
> The reason that I think that there might be a phase inversion is that
> the (radiator plus reflector) could be considered to be a (radiator and
> its image). At the (perfectly conducting) reflector the voltage will be
> zero and the current will be infinite, which implies that, at the
> reflector, the reflected wave must be phase inverted wrt the radiated
wave.
>
> Any thoughts?
>

2910. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 07:15:17 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13ib249jbhh1253@corp.supernews.com>
Source record: 34842

Jimmie D wrote:
>
> I once saw a demonstration that "BIG UGLY" cb antennas, these are
> approximately 1/8 wl and have a huge loading coil, have more gain than a 1/4
> wl radiator. This certainly appeared to be the case when both the antenna
> being test and the field strength meter's antenna were both the "big ugly"
> variety and relatively close together(50'). Could this "gain" be a result of
> magnetic coupling between the coils or was some other trickery being
> performed.

There's no doubt this was some sort of trickery. I'd bet any amount of money that if properly measured, the loaded 1/8 wave antenna would be shown to have less gain due to lower efficiency. Even moderately accurate antenna gain measurements are much more difficult to make than most people realize, and there are many ways to be fooled. I couldn't begin to list the all ways you could set up a demonstration like that to get whatever result you desired.

Roy Lewallen, W7EL

2911. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 11:19:33 UTC
From: Dave <noone@nowhere.com>
Message-ID: <9ljVi.10528$gl1.9539@trndny09>
Source record: 34843

"art" <aunwin@insightbb.com> wrote in message
news:1193624632.889155.261350@57g2000hsv.googlegroups.com...
> On 28 Oct, 17:27, Cecil Moore <nos...@w5dxp.com> wrote:
>> art wrote:
>> > Where is the information that backs that statement as I need to check
>> > that out?
>>
>> Isn't it obvious that since RF waves travel at the speed
>> of light and it is impossible for an electron to travel
>> at the speed of light, that RF waves are made up of
>> something other than electrons?
>> --
>> 73, Cecil http://www.w5dxp.com
>
> We may be getting confused with nomenclature here.
> I think most people have had to brush off from their clothing
> electrostatic
> particles. So I will call it a static particle without reference to an
> electron.
> That static particle can rest on a diagmatic material asd copper and
> aluminum,
> gold, silver etc is in that class. It is also this class of material
> that
> is used for antennas no less!
> So static particles are allowed to rest on an antenna.
> Now a antenna is a tank circuit where the distributed constants of
> inductance
> and capacitance are energy storage containers. Now is that hard to
> understand?
> And the L,C ratio to each other is very much a constant in antenna
> mathematics.
> Do we have anything else? Yes we have resistance. All in all just
> three
> distributed components
> With a tank curcuit the energy containers release their energy in
> pulsatic
> form just like the voltage on the Tesla coil .
> In the case of a radiator a spark is not produced as the power goes to
> the
> capacitor which later on will release its stored power which goes
> back to
> the inductance.
> Now if resistance is not present then we would have a loss less system
> right?

> Unfortunately there is a litle resistance present but it will act for
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> time in pendulum style using very little energy.
> When a pulse of energy is released down stream to the other end any
> static
> particles will be projected away from the surface where it acts as a
> radio
> communication carrier.
> So call this static partical at rest on the radiator surface what you
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> it certainly does not produce a photon.
> As there is no explanation available as to what radiation is I am
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> encompassed by an arbitary field which conformes with Maxwells laws as
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> to determine characteristics of a radiator via computor programs now
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> Now there are sonme other materials which will allow a small amount of
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> accumulation on the surface such as some types of steel e.t.c which
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> poor radiators.
> Why? Because they are not fully populated with static particles or
> what some
> call free electons.
> Now this explanation fits very well together so I consider it a
> suitable
> explanation of radiation in the absence of any other explanation.
> FIND FAULT WITH IT IF YOU CAN AND LET ME KNOW SO I CAN AMMEND IT.
> Good luck and best regards
> Art Unwin KB9MZ.......xg
>

ah, this explains a lot... Art is an aetherist... see
http://en.wikipedia.org/wiki/Luminiferous_aether
the mysterious 'static particles' that aren't bound to the material and
carry the electromagnetic energy can only be the aether. since it is well
known how much energy is needed to free an electron from a metalic surface,
and as was pointed out that if it was really electrons that were leaving the
surface it would require a DC component in addition to the RF to replace

them or the antenna would become charged, it must be aether particles that art is talking about. They would satisfy the massless speed of light particles stuck on the surface and other crud that art is dreaming about in his crude attempt to explain electromagnetics.

2912. Re: question about wire antenna and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 11:53:46 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <eRjVi.1816$nN3.1088@newssvr17.news.prodigy.net>
Source record: 34844

Tam/WB2TT wrote:
> "Cecil Moore" <nospam@w5dxp.com> wrote in message
>> It does that by not allowing reflected energy to
>> reach the transmitter and redistributing the
>> reflected energy back toward the antenna as
>> part of the forward wave. Thus a transmitter can
>> be sourcing 100 watts while the forward power
>> on the transmission line is 200 watts.
>>
> What it really is is an impedance matching network. You adjust the antenna
> tuner so that the transmitter sees 50 Ohms. If your SWR meter is calibrated
> for 50 Ohms, that means an SWR of 1:1 (between the tuner and the radio).

Yes, and that is a Z0-match to 50 ohms. What happens
at a Z0-match is wave cancellation of reflected waves
through destructive interference which redistributes
the reflected energy back toward the antenna in the
form of constructive interference energy that joins
the forward wave.

micro.magnet.fsu.edu/primer/java/scienceopticsu/interference/waveinteractions/index.html

"... when two waves of equal amplitude and wavelength that are
180-degrees ... out of phase with each other meet, they are not actually
annihilated, ... All of the photon energy present in these waves must
somehow be recovered or redistributed in a new direction, according to
the law of energy conservation ... Instead, upon meeting, the photons
are redistributed to regions that permit constructive interference, so
the effect should be considered as a redistribution of light waves and
photon energy rather than the spontaneous construction or destruction of
light."

The reason that the transmitter is protected is that
the Z0-match *causes* that redistribution of the reflected
energy back toward the antenna. Protecting the transmitter
is a side-effect of tuning the entire antenna *system*
to resonance.
--
73, Cecil http://www.w5dxp.com

2913. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 11:56:15 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <yTjVi.1817$nN3.1278@newssvr17.news.prodigy.net>
Source record: 34845

Stefan Wolfe wrote:
> This is where I plateau in terms of
> physics comprehension; I am not able to tell the difference between a wave
> and a particle, understanding as well that there may be none.

If you test expecting to find a wave, you will.
If you test expecting to find a particle, you will. :-)
--
73, Cecil http://www.w5dxp.com

2914. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 12:09:19 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <P3kVi.15771$ID6.9550@newssvr27.news.prodigy.net>
Source record: 34846

art wrote:
> So call this static particle at rest on the radiator surface
> what you want - it certainly does not produce a photon.
> FIND FAULT WITH IT IF YOU CAN AND LET ME KNOW SO I CAN AMMEND IT.

When a charged particle encounters an antenna, the
energy is transferred to the conductor causing a
photonic wave that travels at the speed of light
(VF) to the receiver and on to ground (if grounded).
Static charges on grounded conductors are immediately
discharged to ground. Most amateur antennas are
grounded through the transceiver chassis. Some are
not grounded but the theory has to work for the
grounded ones as well.
--
73, Cecil http://www.w5dxp.com

2915. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 12:21:45 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <tfkVi.1818$nN3.689@newssvr17.news.prodigy.net>
Source record: 34847

Jimmie D wrote:
> I once saw a demonstration that "BIG UGLY" cb antennas, these are
> approximately 1/8 wl and have a huge loading coil, have more gain than a 1/4
> wl radiator. This certainly appeared to be the case when both the antenna
> being test and the field strength meter's antenna were both the "big ugly"
> variety and relatively close together(50'). Could this "gain" be a result of
> magnetic coupling between the coils or was some other trickery being
> performed.

Most likely trickery but could conceivably be achieved
through phasing of co-linear radiators. The total radiated
power was no doubt less than the 1/4WL but the phasing
might have caused constructive interference in the remaining
RF waves in the direction of the detector. A loaded CB
antenna does not normally require a "huge loading coil"
so it may have been a phase-reversing coil of sorts as
described by Kraus.
--
73, Cecil http://www.w5dxp.com

2916. Effective IT Contract Negotiations

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 12:23:49 UTC
From: ciotalk@gmail.com
Message-ID: <1193660629.218901.61000@i13g2000prf.googlegroups.com>
Source record: 34848

How we negotiate the IT services or software licensing related contracts has a significant impact on how IT meets "getting more done with less" expectations set by executive management. How do we plan and carry out such negotiations for success? Is outsourcing such contract negotiations a good option?

Click here to listen live: http://www.ciotalkradio.com/archives.html

2917. Adopting Enterprise Virtualization: A Practitioner's Perspective

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 12:25:35 UTC
From: ciotalk@gmail.com
Message-ID: <1193660735.541344.191760@e9g2000prf.googlegroups.com>
Source record: 34849

While Enterprise Virtualization technology has tremendous potential
what does it take for an IT leader to get it introduced and adopted in
his/her organization in a planned fashion? What are the challenges and
possible remedies?

Click here to listen live: http://www.ciotalkradio.com/archives.html

2918. Life of a CIO in 2012

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 12:26:45 UTC
From: ciotalk@gmail.com
Message-ID: <1193660805.750646.262160@t8g2000prg.googlegroups.com>
Source record: 34850

Business and IT are changing at a warp speed. IT leadership is on its toes playing catch-up with a mandate to make IT lean and do more with less. On top of that, we have the baby boomer exodus which will be leaving IT departments with an acute manpower crunch. If you are an over worked CIO who has had enough already, you can imagine work life 5 years from now. If you are a CIO aspirant, assess if this is still the job for you, and buckle up!

Click here to listen live: http://www.ciotalkradio.com/archives.html

2919. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 12:27:24 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <MkkVi.1819$nN3.1436@newssvr17.news.prodigy.net>
Source record: 34851

Jimmie D wrote:
> "Cecil Moore" <nospam@w5dxp.com> wrote in message
> news:KKpUi.542$yV6.341@newssvr25.news.prodigy.net...
>> This thread is started to allow anyone who believes
>> in "waves of average power" to say so and explain
>> why they believe such.
>
> Couldnt that be considered an oxymoron.

The word "believe" seems to have some religious
connotation so please replace "believe" with
the word "support" above. I didn't think anyone
supported the concept of "Waves of average power"
but apparently I was wrong. I personally support
the concept of RF energy waves associated with
ExB RMS watts just as most technical textbooks do.
--
73, Cecil http://www.w5dxp.com

2920. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 12:31:36 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <lokVi.15772$lD6.370@newssvr27.news.prodigy.net>
Source record: 34852

Jimmie D wrote:
> If Art was correct you could generate RF just by passing DC through a 1
> wavelength loop. Gee wouldnt that make building a transmitter easy.

It would also mean that electrons are flowing into
the antenna and not returning to the source through
the transmission line.
--
73, Cecil http://www.w5dxp.com

2921. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 12:45:45 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <YBkVi.1834$nN3.823@newssvr17.news.prodigy.net>
Source record: 34853

Cecil Moore wrote:
> ExB RMS watts just as most technical textbooks do.

Sorry, should have been "RMS ExB = watts".
--
73, Cecil http://www.w5dxp.com

2922. Re: Cushcraft R5/R7 Matching Network (MN-7) Rebuild

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 13:24:27 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <4725df04$0$19635$4c368faf@roadrunner.com>
Source record: 34854

"gb" <w9nogbspam@arrlspamno.net> wrote in message
news:z6mdnZ68Aay0qLjanZ2dnUVZ_hmtnZ2d@comcast.com...
> This article describes how to rebuild a matching unit of a Cushcraft R5
> vertical -- by --G0WCW
>
> http://www.mrs.bt.co.uk/mrs/r5/
>
> Nice work!
> http://www.mrs.bt.co.uk/mrs/r5/DSCN2478.JPG
> Enclosure
>
> The box is from maplin, product number YM91Y and is one of their 'IP
> enclosure' range. The box is 150 x 110 x 70mm in size (product codes
> YM91Y - grey, YM93B - grey with clear lid). Cost is around six UK pounds.
>
> It is physically the same size as the Cushcraft variant, but the PCB has
> to be slightly 'nibbled' at the corners to get it to fit inside the newer
> box. I'd say the original Cushcraft enclosure isn't that good as they used
> steel screws into brass fixings. The screws rust over and then shear off.
> In my view, the Maplin IP enclosure is a better solution to outdoor use
> (IP56 rated).
>
>
>

Anyone have a schematic of the matching network. I have two antennas and
both are missing the box.

Jimmie

2923. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 13:26:00 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193664360.300374.56140@y42g2000hsy.googlegroups.com>
Source record: 34855

On 29 Oct, 04:19, "Dave" <no...@nowhere.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1193624632.889155.261350@57g2000hsv.googlegroups.com...
>
>
>
>
>
> > On 28 Oct, 17:27, Cecil Moore <nos...@w5dxp.com> wrote:
> >> art wrote:
> >> > Where is the information that backs that statement as I need to check
> >> > that out?
>
> >> Isn't it obvious that since RF waves travel at the speed
> >> of light and it is impossible for an electron to travel
> >> at the speed of light, that RF waves are made up of
> >> something other than electrons?
> >> --
> >> 73, Cecil http://www.w5dxp.com
>
> > We may be getting confused with nomenclature here.
> > I think most people have had to brush off from their clothing
> > electrostatic
> > particles. So I will call it a static particle without reference to an
> > electron.
> > That static particle can rest on a diagmatic material asd copper and
> > aluminum,
> > gold, silver etc is in that class. It is also this class of material
> > that
> > is used for antennas no less!
> > So static particles are allowed to rest on an antenna.
> > Now a antenna is a tank circuit where the distributed constants of
> > inductance
> > and capacitance are energy storage containers. Now is that hard to
> > understand?
> > And the L,C ratio to each other is very much a constant in antenna
> > mathematics.
> > Do we have anything else? Yes we have resistance. All in all just
> > three
> > distributed components
> > With a tank curcuit the energy containers release their energy in
> > pulsatic
> > form just like the voltage on the Tesla coil .

> > In the case of a radiator a spark is not produced as the power goes to
> > the
> > capacitor which later on will release its stored power which goes
> > back to
> > the inductance.
> > Now if resistance is not present then we would have a loss less system
> > right?
> > Unfortunately there is a litle resistance present but it will act for
> > some
> > time in pendulum style using very little energy.
> > When a pulse of energy is released down stream to the other end any
> > static
> > particles will be projected away from the surface where it acts as a
> > radio
> > communication carrier.
> > So call this static partical at rest on the radiator surface what you
> > want
> > it certainly does not produce a photon.
> > As there is no explanation available as to what radiation is I am
> > content to
> > stay
> > with what I have deduced from adding a time variAnce to Gauss's static
> > law
> > encompassed by an arbitary field which conformes with Maxwells laws as
> > used
> > to determine characteristics of a radiator via computor programs now
> > in existance.
> > Now getting back to electrons static forms ofcourse, what a
> > coincidence that we
> > make our antennas od a diagmatic material which by chance or
> > coincidence or
> > luck of the draw is the only type of material that will allow a
> > accumullation
> > of static particles upon its surface.
> > Now there are sonme other materials which will allow a small amount of
> > static
> > accumulation on the surface such as some types of steel e.t.c which
> > make
> > poor radiators.
> > Why? Because they are not fully populated with static particles or
> > what some
> > call free electons.
> > Now this explanation fits very well together so I consider it a
> > suitable
> > explanation of radiation in the absence of any other explanation.
> > FIND FAULT WITH IT IF YOU CAN AND LET ME KNOW SO I CAN AMMEND IT.
> > Good luck and best regards
> > Art Unwin KB9MZ.......xg
>
> ah, this explains a lot... Art is an aetherist...

seehttp://en.wikipedia.org/wiki/Luminiferous_aether
> the mysterious 'static particles' that aren't bound to the material and
> carry the electromagnetic energy can only be the aether. since it is well
> known how much energy is needed to free an electron from a metalic surface,
> and as was pointed out that if it was really electrons that were leaving the
> surface it would require a DC component in addition to the RF to replace
> them or the antenna would become charged,

Get your mind back to the physics mode. Consider the basicvs infolved
with a field
in equilibrium as in Gauss's ,law of statics.
This method to explain things is used by physicists every day
In a short moment in time a DC pilse enters the field which breaks the
internal equilibrium where the boundary has a rapid change in contour
and fractures.
The DC blast removes the surface particles and in this moment where
equilibrium does not exist the static particles are projected beyond
the boundary before the boundary shape
is repaired. Have you got your mind in the thinking mode yet?Now what
does the blast consist of when energy is released nfrom a capacitor
bearing in mind that the capacitor plates are made of a diagmatic
material? Remember that for this method of deduction all "flux" must
pass thru the field so what is it that is stored on the surface plates
on the capacitor? Sice some particles are ejected from the field it
must bve the same type particles that leave a capacitor where some
replace those that are ejected.
Art Unwin KB9MZ....XG

it must be aether particles that
> art is talking about. They would satisfy the massless speed of light
> particles stuck on the surface and other crud that art is dreaming about in
> his crude attempt to explain electromagnetics.- Hide quoted text -
>
> - Show quoted text -

2924. Re: Cushcraft R5/R7 Matching Network (MN-7) Rebuild

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 14:25:17 UTC
From: The Shadow <Cranston@CobaltClub.com>
Message-ID: <j3mVi.35200$bL7.12925@newsfe09.phx>
Source record: 34856

"Jimmie D" <GFENDER@carolina.rr.com> wrote in message
news:4725df04$0$19635$4c368faf@roadrunner.com...
>
> "gb" <w9nogbspam@arrlspamno.net> wrote in message
> news:z6mdnZ68Aay0qLjanZ2dnUVZ_hmtnZ2d@comcast.com...
>> This article describes how to rebuild a matching unit of a Cushcraft R5
>> vertical -- by --G0WCW
>>
>> http://www.mrs.bt.co.uk/mrs/r5/
>>
>> Nice work!
>> http://www.mrs.bt.co.uk/mrs/r5/DSCN2478.JPG
>> Enclosure
>>
>> The box is from maplin, product number YM91Y and is one of their 'IP
>> enclosure' range. The box is 150 x 110 x 70mm in size (product codes
>> YM91Y - grey, YM93B - grey with clear lid). Cost is around six UK pounds.
>>
>> It is physically the same size as the Cushcraft variant, but the PCB has
>> to be slightly 'nibbled' at the corners to get it to fit inside the newer
>> box. I'd say the original Cushcraft enclosure isn't that good as they
>> used steel screws into brass fixings. The screws rust over and then shear
>> off. In my view, the Maplin IP enclosure is a better solution to outdoor
>> use (IP56 rated).
>>
>>
>>
>
> Anyone have a schematic of the matching network. I have two antennas and
> both are missing the box.
>
>
> Jimmie

See URL:
http://www.pa0fri.geerligs.com/

Click on ANT, then green dot next to Cushcraft R5, maintenance and repair

Lamont - The Shadow Knows

2925. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 14:31:45 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193668305.977308.30370@o3g2000hsb.googlegroups.com>
Source record: 34857

On 29 Oct, 04:56, Cecil Moore <nos...@w5dxp.com> wrote:
> Stefan Wolfe wrote:
> > This is where I plateau in terms of
> > physics comprehension; I am not able to tell the difference between a wave
> > and a particle, understanding as well that there may be none.
>
> If you test expecting to find a wave, you will.
> If you test expecting to find a particle, you will. :-)
> --
> 73, Cecil http://www.w5dxp.com

Cecil
The Masters did not have computors so they tried deduction removing
all that did not meet empirical or mathematical tests before they
expoused them to the World.
In this case they meet empirical tests, they meet mathematical tests,
they abide by Maxwells laws and for those who demand more get an
optimiser computor program and without tying it to a planar mode the
antenna program will come back automatically with a non planar mode of
radiator, a radiator of any size or shape or elevation that is in a
state of equilibrium in singular or group form. The Masters found that
when working along side nature you have to walk in natures shoes but
never, never mess with mother nature.
Cecil, people have stopped calling me a blithering idiot! Are they
beginning to think that on this newsgroup I operate under a psuedo
name then who am I? Should we test QST and ask them to publish this
instead of mobile antenna guff? Where is the person who can clinically
disembowel this model and what University does he teach in? Is the
World correct in allowing computors to machinate the numbers
mathematically first and then allowing scientists to collect those
that look O.K. and then play with them, or did the Masters have the
right idea of turning that approach around for gaining advances?
Your friend
Art

2926. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 14:47:33 UTC
From: Bill Ogden <billogden@optonline.net>
Message-ID: <8omVi.14$So6.0@newsfe12.lga>
Source record: 34858

Very interesting, indeed. This probably accounts for the gradual shift (not for the better) in QST technical articles over a number of years. There seems to be more "publicity oriented" wording than precise technical content compared to twenty or thirty years ago. I had assumed this was an intentional effort to better address new hams, but I see it may have been due to the editing process.

This editing problem is certainly not confined to QST. One of the few things that sends my blood pressure to an astronomical level is for an editor to make changes they do not understand. I depend on various font and indentation settings for much of my material; now and then an editor will decide to "standardize" these and I go completely off the wall. Unfortunately, in many organizations the editors usually have the last shot at material.

Bill - W2WO

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:13i4ih8olso4n03@corp.supernews.com...
> QST editors can't be expected to be experts on all the topics they have to
> deal with. Over the years, they've dealt with the problem in various ways.
> One was to establish a pool of "Technical Advisors" -- volunteers who had
> particular expertise in various areas. Some manuscripts being considered
> for publication were sent to the appropriate TAs for comments and review.
> This practice slowly died out, but I don't know why. I suspect it was
> because the editors seldom had the time for this step in the process due
> to erratic scheduling.
>
> Eventually, they adopted a solution which was easy on the editors and
> their schedules: post the proposed articles to a restricted web site where
> the TAs could review them and leave comments. This saved the time of
> communicating with individual TAs, and made it unnecessary to wait for a
> response -- if comments weren't there by the deadline, too bad. What I saw
> as one problem with this approach was that comments and analyses were
> regularly being made by TAs whose appointments had nothing at all to do
> with the subject matter. As an example (not representing any actual
> particular occurrence), a TA whose expertise was, say, legal matters or
> publicity would review (for technical content) an article on phased
> arrays. As far as I could tell, their reviews were weighted equally to
> those from people who really understood the topic. In any case, the one or
> few reviews from knowledgeable people were generally lost in the noise. I
> don't know if this is the method still being used -- I resigned my TA
> appointment several years ago when it became apparent that I was no longer
> able to make any substantial contribution. I know of at least a couple of
> very knowledgeable people who have done likewise. This is a shame, because

> they're perfectly willing to provide free technical assistance, yet the
> ARRL doesn't seem able to find a way to take advantage of it.
>
> I'm not sure they've ever solved the problem of editors who don't
> understand the material modifying it in such a way as to make it no longer
> true. In all cases but one when this happened to me, I was able to correct
> the problems before publication. In one case, however, I wasn't given
> enough time to correct the numerous misinterpretations, invalid
> "explanations", and other seriously wrong modifications made by the editor
> and had to pull the article(*). Several extremely capable people I know,
> however, have had serious errors introduced to their articles by the
> editor *after their final review*, so they didn't even get to see the
> errors until the article was published under their name. Most of these
> people will never write for QST again as a result. This is one of the
> reasons that QST has a smaller pool of knowledgeable and capable authors
> to draw from.
>
> So when you see a technically weak article in QST, the author might not be
> entirely at fault.
>
> (*) I want to make it clear that I'm very aware that my writing and
> communicating skills aren't all that great, and I really appreciate having
> an editor improve the style, clarity, and brevity of my writing, as well
> as questioning any weak or inconsistent arguments I've made. [A good
> editor would have cut half the words from the preceding sentence, and made
> it a lot clearer at the same time.] So I welcome editing. What I do object
> to is editing which changes the core meaning of the content and/or results
> in its being technically incorrect.
>
> Roy Lewallen, W7EL

2927. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 15:08:50 UTC
From: Dave <noone@nowhere.com>
Message-ID: <6ImVi.4742$8R1.2251@trndny02>
Source record: 34859

"art" <aunwin@insightbb.com> wrote in message
news:1193664360.300374.56140@y42g2000hsy.googlegroups.com...
> The DC blast removes the surface particles and in this moment where
> equilibrium does not exist the static particles are projected beyond
> the boundary before the boundary shape
> is repaired. Have you got your mind in the thinking mode yet?Now what
> does the blast consist of when energy is released nfrom a capacitor
> bearing in mind that the capacitor plates are made of a diagmatic
> material? Remember that for this method of deduction all "flux" must
> pass thru the field so what is it that is stored on the surface plates
> on the capacitor? Sice some particles are ejected from the field it
> must bve the same type particles that leave a capacitor where some
> replace those that are ejected.
> Art Unwin KB9MZ....XG

ah, a blast removes the particles... you know how much of a 'blast' is
required to create corona on a wire the way you describe? what electric
field strength at the surface of a conductor is required to create that type
of breakdown in air? how much in vaccuum? define your terms and show all
work or you will lose points on the final grade.

what happens if i build a capacitor with ferromagnetic material??? does it
not work? what about if i use paramagnetic material?

2928. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 15:27:33 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193671653.357526.76540@k79g2000hse.googlegroups.com>
Source record: 34860

On 29 Oct, 08:08, "Dave" <no...@nowhere.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1193664360.300374.56140@y42g2000hsy.googlegroups.com...
>
> > The DC blast removes the surface particles and in this moment where
> > equilibrium does not exist the static particles are projected beyond
> > the boundary before the boundary shape
> > is repaired. Have you got your mind in the thinking mode yet?Now what
> > does the blast consist of when energy is released nfrom a capacitor
> > bearing in mind that the capacitor plates are made of a diagmatic
> > material? Remember that for this method of deduction all "flux" must
> > pass thru the field so what is it that is stored on the surface plates
> > on the capacitor? Sice some particles are ejected from the field it
> > must bve the same type particles that leave a capacitor where some
> > replace those that are ejected.
> > Art Unwin KB9MZ....XG
>
> ah, a blast removes the particles... you know how much of a 'blast' is
> required to create corona on a wire the way you describe? what electric
> field strength at the surface of a conductor is required to create that type
> of breakdown in air?

A battery, a flyback transformer etc etc
how much in vaccuum?

Does not require a vacuum. Remember the old days of spark plug
transmissions?

define your terms and show all
> work or you will lose points on the final grade.
>
> what happens if i build a capacitor with ferromagnetic material??? does it
> not work?

No

what about if I use paramagnetic material?

Yes

David turn your attention to antenna computor programs
When made they made assumptions which is a no, no with laws.
The same computor program produces verification of the model!
So why not think about whether computor programs are incorrectly based
or Maxwells laws has some errors. Start your investigation from a

rock
hard surface and not sand which has a habit of drifting in time and
determine
or verify again Maxwells laws and computor programming basics.
Is science back to the poll taking days for verification?
Stop floundaring and get down to serious thinking since memorising
stuff is not getting the job done as it did in college.
Art KB9MZ.....XG

2929. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 15:37:02 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193672222.346512.3630@22g2000hsm.googlegroups.com>
Source record: 34861

On 29 Oct, 05:31, Cecil Moore <nos...@w5dxp.com> wrote:
> Jimmie D wrote:
> > If Art was correct you could generate RF just by passing DC through a 1
> > wavelength loop. Gee wouldnt that make building a transmitter easy.
>
> It would also mean that electrons are flowing into
> the antenna and not returning to the source through
> the transmission line.
> --
> 73, Cecil http://www.w5dxp.com

Static particles are discharged from the antenna, not flowing!
What returns to the scource is the result of resistance
being present
Art

2930. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 15:45:01 UTC
From: Dave <noone@nowhere.com>
Message-ID: <1enVi.1737$hd1.533@trndny01>
Source record: 34862

"art" <aunwin@insightbb.com> wrote in message
news:1193671653.357526.76540@k79g2000hse.googlegroups.com...
> On 29 Oct, 08:08, "Dave" <no...@nowhere.com> wrote:
>> "art" <aun...@insightbb.com> wrote in message
>>
>> news:1193664360.300374.56140@y42g2000hsy.googlegroups.com...
>>
>> > The DC blast removes the surface particles and in this moment where
>> > equilibrium does not exist the static particles are projected beyond
>> > the boundary before the boundary shape
>> > is repaired. Have you got your mind in the thinking mode yet?Now what
>> > does the blast consist of when energy is released nfrom a capacitor
>> > bearing in mind that the capacitor plates are made of a diagmatic
>> > material? Remember that for this method of deduction all "flux" must
>> > pass thru the field so what is it that is stored on the surface plates
>> > on the capacitor? Sice some particles are ejected from the field it
>> > must bve the same type particles that leave a capacitor where some
>> > replace those that are ejected.
>> > Art Unwin KB9MZ....XG
>>
>> ah, a blast removes the particles... you know how much of a 'blast' is
>> required to create corona on a wire the way you describe? what electric
>> field strength at the surface of a conductor is required to create that
>> type
>> of breakdown in air?
>
> A battery, a flyback transformer etc etc
> how much in vaccuum?
>
> Does not require a vacuum. Remember the old days of spark plug
> transmissions?
>
> define your terms and show all
>> work or you will lose points on the final grade.
>>
>> what happens if i build a capacitor with ferromagnetic material??? does
>> it
>> not work?
>
> No
>
> what about if I use paramagnetic material?
>
> Yes

>
> David turn your attention to antenna computor programs
> When made they made assumptions which is a no, no with laws.
> The same computor program produces verification of the model!
> So why not think about whether computor programs are incorrectly based
> or Maxwells laws has some errors. Start your investigation from a
> rock
> hard surface and not sand which has a habit of drifting in time and
> determine
> or verify again Maxwells laws and computor programming basics.
> Is science back to the poll taking days for verification?
> Stop floundaring and get down to serious thinking since memorising
> stuff is not getting the job done as it did in college.
> Art KB9MZ.....XG
>
>

why should i believe you, you just said that a capacitor with iron plates
can't work which is provably wrong. your understanding of computer modeling
of antennas is similarly flawed.

2931. Re: Distance between beams

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 16:05:32 UTC
From: Barrett <barrett@blueyounder.co.uk>
Message-ID: <gxnVi.461388$xp6.166077@fe3.news.blueyonder.co.uk>
Source record: 34863

I have one last question.

I an using a home made tilt over mast made up of aluminium scaffold tube (2" OD heavy duty) and the same tube for the stub mast. I have two heavy duty brackets made up that clamp onto the scaffold tube to hold the rotator and support bearing in place.

What would be a good average distance to have between the brackets that hold the rotator and bearing?

Thanks

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message news:13i7l7frevqr23@corp.supernews.com...
>
> "Barrett" <barrett@blueyounder.co.uk> wrote in message
> news:LbDUi.104508$lV4.45588@fe2.news.blueyonder.co.uk...
>>I have two beams I want to install on the same mast. They are, Cushcraft
>>MA5B and an 9 element crossed Tonna.
>>
>> What is the optimal distance that these antennas should be spaced?
>>
>> What is the minimum distance apart can they be mounted before they have a
>> negative effect on each other?
>>
>> Does it matter what beam is mounted on the top?
>>
>> Does it make any difference how close the beams are mounted to the
>> rotator?
>>
>> This is the first time that I have put any beams up, so I thought I
>> better get some good advice first.
>>
>> Thanks
>>
>
> I don't think there is any real optimal distance within what most can put
> us. I tried to look at what was needed vers what I could put up about a
> year ago. I did see the url Ian listed. My requirements was to have
> about 15 feet of mast out the top of the tower that is 57 feet out of the
> ground.. At the top went a M2 432 beam, about 4 feet below that went a M2
> 2 meter beam both beams were on a 15 foot boom, and close to 5 feet under
> that went a 5 element 6 meter beam on a 18 foot boom. Just over the top
> of the tower was a 3 element triband for 20,15,and 10 meters. All
> antennas are horizontal. I am sure this is nowhere near optimal but just

> the best for what I had to work with.
>
>

2932. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 16:32:18 UTC
From: nm5k@wt.net
Message-ID: <1193675538.629556.177270@o3g2000hsb.googlegroups.com>
Source record: 34864

On Oct 29, 8:31 am, art <aun...@insightbb.com> wrote:

> Cecil, people have stopped calling me a blithering idiot!

After a while it gets boring... :/
MK

2933. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 17:20:34 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193678434.881526.35620@o3g2000hsb.googlegroups.com>
Source record: 34865

On 29 Oct, 09:32, n...@wt.net wrote:
> On Oct 29, 8:31 am, art <aun...@insightbb.com> wrote:
>
> > Cecil, people have stopped calling me a blithering idiot!
>
> After a while it gets boring... :/
> MK

Stick to making loads and top hats for mobile anttenas.
You are out of your league on this one
Art

2934. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 17:38:21 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193679501.655956.101900@o3g2000hsb.googlegroups.com>
Source record: 34866

On 29 Oct, 08:45, "Dave" <no...@nowhere.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1193671653.357526.76540@k79g2000hse.googlegroups.com...
>
>
>
>
>
> > On 29 Oct, 08:08, "Dave" <no...@nowhere.com> wrote:
> >> "art" <aun...@insightbb.com> wrote in message
>
> >>news:1193664360.300374.56140@y42g2000hsy.googlegroups.com...
>
> >> > The DC blast removes the surface particles and in this moment where
> >> > equilibrium does not exist the static particles are projected beyond
> >> > the boundary before the boundary shape
> >> > is repaired. Have you got your mind in the thinking mode yet?Now what
> >> > does the blast consist of when energy is released nfrom a capacitor
> >> > bearing in mind that the capacitor plates are made of a diagmatic
> >> > material? Remember that for this method of deduction all "flux" must
> >> > pass thru the field so what is it that is stored on the surface plates
> >> > on the capacitor? Sice some particles are ejected from the field it
> >> > must bve the same type particles that leave a capacitor where some
> >> > replace those that are ejected.
> >> > Art Unwin KB9MZ....XG
>
> >> ah, a blast removes the particles... you know how much of a 'blast' is
> >> required to create corona on a wire the way you describe? what electric
> >> field strength at the surface of a conductor is required to create that
> >> type
> >> of breakdown in air?
>
> > A battery, a flyback transformer etc etc
> > how much in vaccuum?
>
> > Does not require a vacuum. Remember the old days of spark plug
> > transmissions?
>
> > define your terms and show all
> >> work or you will lose points on the final grade.
>
> >> what happens if i build a capacitor with ferromagnetic material??? does
> >> it

> >> not work?
>
> > No
>
> > what about if I use paramagnetic material?
>
> > Yes
>
> > David turn your attention to antenna computor programs
> > When made they made assumptions which is a no, no with laws.
> > The same computor program produces verification of the model!
> > So why not think about whether computor programs are incorrectly based
> > or Maxwells laws has some errors. Start your investigation from a
> > rock
> > hard surface and not sand which has a habit of drifting in time and
> > determine
> > or verify again Maxwells laws and computor programming basics.
> > Is science back to the poll taking days for verification?
> > Stop floundaring and get down to serious thinking since memorising
> > stuff is not getting the job done as it did in college.
> > Art KB9MZ.....XG
>
> why should i believe you, you just said that a capacitor with iron plates
> can't work which is provably wrong.
David you have now found something to invest in

With the sky rocketing costs of aluminium and copper e.t.c
now is the time to get in on ferrite capacitors.
Now that you have approved of its use for capacitor
you can reap your just rewards

your understanding of computer modeling
> of antennas is similarly flawed.- Hide quoted text -

I just buy the commercial programs on the assumption
they are not selling me junk. If the results are in
accordance with Maxwells laws then that is fineby me.
Art KB9MZ......XG

>
> - Show quoted text -

2935. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 17:51:33 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fg56jd$1638$1@f04n12.cac.psu.edu>
Source record: 34867

nm5k@wt.net wrote:
> On Oct 26, 1:20 pm, Michael Coslo <m...@psu.edu> wrote:
>
>> I've considered putting a tuner on my Bugcatcher for 80 meters, but
>> haven't. The thing is so narrow there that the alternative is two taps
>> for the phone portion of the band.
>
> That would more more for impedance matching rather than the
> loading coil itself. I have no real problem with that. I've often used
> simple L network tuners for matching mobile antennas.
> The system I have a problem with is using the tuner as the
> loading coil itself. It's usually a disaster as far as efficiency.

Okay, I got it, it makes sense that "tuning the coathanger" approach
would be bad.

> Maximum current is at the coil, and often that coil will be
> surrounded by body metal. Not good.. Poor current distribution
> through the whip, and low overall efficiency. Not good..
> If they left out bugcatchers in the test, no wonder all those
> tuner fed things looked so good... :(
> If your antenna acts very "high Q", that's actually good. :)
> It means it's probably a pretty decent radiator.
> I'd be more worried if it acted overly broadbanded, or low Q.
> You won't lose much if you use a tuner for Z matching in your
> case.

I've been pleased so far. I worked some CA QSO party from the middle of
PA on 20 meters with it, and all I could hear I could work (100 watts)
Florida, the midwest, and all the typical 20 meter paths from here too.

40 meters received good signal reports. I worked South Carolina, the
Outer Banks, Virginia. Maine Not enough to make a definitive statement,
but it doesn't not work. No QSO's on 80 yet, but the next evening I take
it out, I'm giving it a try.

It is narrow, but that's only been a big problem on 80.

2936. Re: antenna reflector

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 17:54:00 UTC
From: Allodoxaphobia <bit-bucket@config.com>
Message-ID: <slrnfic7ho.2gj3.bit-bucket@shell.config.com>
Source record: 34868

On Sun, 28 Oct 2007 09:48:18 +0000, a wrote:
> a wrote:
>> I'm looking at making a parabolic reflector for a wifi link.
>>
>> I'm trying to work out the distance required between the radiating
>> element and the reflector.
>> Should it be an odd number of quarter wavelengths, or an even number?

> Thanks for the replies.
> I agree that the radiating element must be placed at the parabola focus
> to give minimal beamwidth, and that this condition is met when the
> radiating element is placed at the focus (which is given by D^2/16d).
>
> The point remains that I can still choose the parabola parameters to set
> the focal length to whatever is desired.
> Should I choose them so that the focal length is an odd or even number
> of quarter wavelengths?

You are getting the use of a _parasitic_ reflector mixed up with what
amounts to a _mirror_ reflector in your case.

It matters _not_ what the distance is from the driven element at the
focus to the surface of the parabolic reflector -- in wavelengths,
inches, centimeters, or furlongs.

What you could do is mount a _parasitic_ reflector outboard of the the
driven element -- and _this_ would be positioned approx 1/4 WL from the
driven element. Tho', how much gain it might add is questionable...

73
Jonesy
--
Marvin L Jones | jonz | W3DHJ | linux
38.24N 104.55W | @ config.com | Jonesy | OS/2
*** Killfiling google posts: <http://jonz.net/ng.htm>

2937. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 18:10:54 UTC
From: Dave <noone@nowhere.com>
Message-ID: <OmpVi.1312$sZ.159@trndny04>
Source record: 34869

"art" <aunwin@insightbb.com> wrote in message
news:1193679501.655956.101900@o3g2000hsb.googlegroups.com...
> On 29 Oct, 08:45, "Dave" <no...@nowhere.com> wrote:
>> "art" <aun...@insightbb.com> wrote in message
>>
>> news:1193671653.357526.76540@k79g2000hse.googlegroups.com...
>>
>>
>>
>>
>>
>> > On 29 Oct, 08:08, "Dave" <no...@nowhere.com> wrote:
>> >> "art" <aun...@insightbb.com> wrote in message
>> >
>> >> >news:1193664360.300374.56140@y42g2000hsy.googlegroups.com...
>> >
>> >> >> > The DC blast removes the surface particles and in this moment where
>> >> >> > equilibrium does not exist the static particles are projected beyond
>> >> >> > the boundary before the boundary shape
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>> >> >> > what
>> >> >> > does the blast consist of when energy is released nfrom a capacitor
>> >> >> > bearing in mind that the capacitor plates are made of a diagmatic
>> >> >> > material? Remember that for this method of deduction all "flux" must
>> >> >> > pass thru the field so what is it that is stored on the surface
>> >> >> > plates
>> >> >> > on the capacitor? Sice some particles are ejected from the field it
>> >> >> > must bve the same type particles that leave a capacitor where some
>> >> >> > replace those that are ejected.
>> >> >> > Art Unwin KB9MZ....XG
>> >
>> >> >> ah, a blast removes the particles... you know how much of a 'blast' is
>> >> >> required to create corona on a wire the way you describe? what
>> >> >> electric
>> >> >> field strength at the surface of a conductor is required to create
>> >> >> that
>> >> >> type
>> >> >> of breakdown in air?
>> >
>> >> > A battery, a flyback transformer etc etc
>> >> > how much in vaccuum?
>> >
>> >> > Does not require a vacuum. Remember the old days of spark plug
>> >> > transmissions?

>>
>> > define your terms and show all
>> >> work or you will lose points on the final grade.
>>
>> >> what happens if i build a capacitor with ferromagnetic material???
>> >> does
>> >> it
>> >> not work?
>>
>> > No
>>
>> > what about if I use paramagnetic material?
>>
>> > Yes
>>
>> > David turn your attention to antenna computor programs
>> > When made they made assumptions which is a no, no with laws.
>> > The same computor program produces verification of the model!
>> > So why not think about whether computor programs are incorrectly based
>> > or Maxwells laws has some errors. Start your investigation from a
>> > rock
>> > hard surface and not sand which has a habit of drifting in time and
>> > determine
>> > or verify again Maxwells laws and computor programming basics.
>> > Is science back to the poll taking days for verification?
>> > Stop floundaring and get down to serious thinking since memorising
>> > stuff is not getting the job done as it did in college.
>> > Art KB9MZ.....XG
>>
>> why should i believe you, you just said that a capacitor with iron plates
>> can't work which is provably wrong.
> David you have now found something to invest in
>
> With the sky rocketing costs of aluminium and copper e.t.c
> now is the time to get in on ferrite capacitors.
> Now that you have approved of its use for capacitor
> you can reap your just rewards
>
>
>
> your understanding of computer modeling
>> of antennas is similarly flawed.- Hide quoted text -
>
> I just buy the commercial programs on the assumption
> they are not selling me junk. If the results are in
> accordance with Maxwells laws then that is fineby me.
> Art KB9MZ......XG
>
>
>>

>> - Show quoted text -
>
>

ok, so where in maxwells laws does the magnetic properties of the capacitor plates affect how it works?

2938. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 19:22:35 UTC
From: Paul <null@null.null>
Message-ID: <47263300$0$79916$742ec2ed@news.sonic.net>
Source record: 34870

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:13i5cs3d5gshs9f@corp.supernews.com...
>[...]
> Coaxial lines do, however, have an interesting characteristic not shared
> by other kinds -- the differential and common mode components aren't
> simply a mathematical convenience, but are actually physically separate.
> If we do the analysis described above, we find that the common mode
> current equals the current on the outside of the shield and the
> differential current equals the current on the inside. As Owen pointed
> out, the differential current is solely on the inside of the shield and
> the common mode current solely on the outside. While this makes the
> effects of each mode current easier to visualize and sometimes to measure,
> the net effects of common mode and differential currents are exactly the
> same for coaxial and non-coaxial lines.

> Owen Duffy wrote:
>> In the case of coax, so-called common mode current flows only on the
>> outside of the outer conductor, and differential mode current flows only
>> on the inside of the outer conductor and outside of the inner conductor.

I assume that you are talking about a length of coax that is attached to a free-space antenna. What about the case where the coax shield is grounded at both ends? (make it a non-ideal ground if you like.) Wouldn't this create a ground-loop that will cause some of the signal current to flow through the ground-connection, thus unbalancing the center-conductor/shield current? In this case, the common-mode current isn't necessarily flowing on the outside of the shield. (I am asking a question here).

Also, consider the case at frequencies low enough that skin-effect doesn't apply. Here there is no inside or outside of the coax shield. Still, the magnetic fields caused by imbalance between center-conductor and shield currents are the same, with or without skin effect.

At least these are the thoughts I had while I was discussing the installation of antennas and tuners on boats. There is no end to the controversy surrounding the grounding of radio equipment on a boat. There the antennas are typically end-fed wires (usually part of the rigging), and some combination of radials and seawater connection for the RF counterpoise.

-Paul

2939. Re: Cushcraft R5/R7 Matching Network (MN-7) Rebuild

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 19:27:15 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <47263410$0$28831$4c368faf@roadrunner.com>
Source record: 34871

```
"The Shadow" <Cranston@CobaltClub.com> wrote in message
news:j3mVi.35200$bL7.12925@newsfe09.phx...
>
> "Jimmie D" <GFENDER@carolina.rr.com> wrote in message
> news:4725df04$0$19635$4c368faf@roadrunner.com...
>>
>> "gb" <w9nogbspam@arrlspamno.net> wrote in message
>> news:z6mdnZ68Aay0qLjanZ2dnUVZ_hmtnZ2d@comcast.com...
>>> This article describes how to rebuild a matching unit of a Cushcraft R5
>>> vertical -- by --G0WCW
>>>
>>> http://www.mrs.bt.co.uk/mrs/r5/
>>>
>>> Nice work!
>>> http://www.mrs.bt.co.uk/mrs/r5/DSCN2478.JPG
>>> Enclosure
>>>
>>> The box is from maplin, product number YM91Y and is one of their 'IP
>>> enclosure' range. The box is 150 x 110 x 70mm in size (product codes
>>> YM91Y - grey, YM93B - grey with clear lid). Cost is around six UK
>>> pounds.
>>>
>>> It is physically the same size as the Cushcraft variant, but the PCB
>>> has to be slightly 'nibbled' at the corners to get it to fit inside the
>>> newer box. I'd say the original Cushcraft enclosure isn't that good as
>>> they used steel screws into brass fixings. The screws rust over and then
>>> shear off. In my view, the Maplin IP enclosure is a better solution to
>>> outdoor use (IP56 rated).
>>>
>>>
>>>
>>
>> Anyone have a schematic of the matching network. I have two antennas and
>> both are missing the box.
>>
>>
>> Jimmie
>
> See URL:
> http://www.pa0fri.geerligs.com/
>
> Click on ANT, then green dot next to Cushcraft R5, maintenance and repair
>
> Lamont - The Shadow Knows
```

Just what I needed, I had bought two antennas at the Shelby hamfest getting them mostly for tubing and hardware. I may be able to get them on the air. The fiberglass insulators on mine are shot, Im not sure how I will repair them. Im thikinking about cutting back the rotten part and then building it back up with glass cloth and resin.

Jimmie

Jimmie

2940. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 19:49:47 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13iceav8cq5jib9@corp.supernews.com>
Source record: 34872

Paul wrote:
> "Roy Lewallen" <w7el@eznec.com> wrote in message
> news:13i5cs3d5gshs9f@corp.supernews.com...
>> [...]
>> Coaxial lines do, however, have an interesting characteristic not shared
>> by other kinds -- the differential and common mode components aren't
>> simply a mathematical convenience, but are actually physically separate.
>> If we do the analysis described above, we find that the common mode
>> current equals the current on the outside of the shield and the
>> differential current equals the current on the inside. As Owen pointed
>> out, the differential current is solely on the inside of the shield and
>> the common mode current solely on the outside. While this makes the
>> effects of each mode current easier to visualize and sometimes to measure,
>> the net effects of common mode and differential currents are exactly the
>> same for coaxial and non-coaxial lines.
>
>> Owen Duffy wrote:
>>> In the case of coax, so-called common mode current flows only on the
>>> outside of the outer conductor, and differential mode current flows only
>>> on the inside of the outer conductor and outside of the inner conductor.
>
> I assume that you are talking about a length of coax that is attached to a
> free-space antenna. What about the case where the coax shield is grounded
> at both ends? (make it a non-ideal ground if you like.) Wouldn't this
> create a ground-loop that will cause some of the signal current to flow
> through the ground-connection, thus unbalancing the center-conductor/shield
> current? In this case, the common-mode current isn't necessarily flowing on
> the outside of the shield. (I am asking a question here).

A tricky part in answering this is determining what you mean by "shield current". There are separate and distinct currents on the inside and outside of the shield. I'll assume that by "shield current" you mean the vector sum of these two currents.

The first part of the answer is that the current on the outside of the inner conductor is always equal to the current on the inside of the shield, and in the opposite direction (that is to say, they comprise a pure differential current), provided that the shield is at least several skin depths thick. This is a consequence of the confinement of the field by the shield, and has nothing to do with what we connect the cable to. Connections only impact the current on the outside.

Now consider what happens when the coax is connected to a free-space dipole, for example. All the current from the center conductor flows into one half the dipole. But the current on the inside of the shield

has two possible paths: to the other half of the dipole or around the end of the shield to the outside of the shield. I won't go into more detail about this, since I've already done so -- you can see what I've written at http://eznec.com/Amateur/Articles/Baluns.pdf.

If you "ground" both ends of the coax, that is, connect them to conductors which provide another path between the two ends, you have a third path the inner shield can follow -- along the "ground" path. So it splits three ways instead of two. If you use a "pigtail" wire for grounding or connecting to the load, it adds inductance to the desired path to the load, which makes the path back along the outside of the coax more desirable, so you end up with more common mode current than you would with a low impedance connection.

> Also, consider the case at frequencies low enough that skin-effect doesn't
> apply. Here there is no inside or outside of the coax shield. Still, the
> magnetic fields caused by imbalance between center-conductor and shield
> currents are the same, with or without skin effect.

I'm not sure I follow this. When the frequency gets low enough that the field can penetrate the shield, the line behaves more like a twinlead line behaves at HF. As I mentioned in my earlier posting, the line can still have common and differential mode currents -- they're just no longer physically separated.

> At least these are the thoughts I had while I was discussing the
> installation of antennas and tuners on boats. There is no end to the
> controversy surrounding the grounding of radio equipment on a boat. There
> the antennas are typically end-fed wires (usually part of the rigging), and
> some combination of radials and seawater connection for the RF counterpoise.

Grounding would be much easier to understand if people would realize that calling a conductor or connection "ground" doesn't impart magical qualities. And that currents flow wherever the impedance dictates.

Roy Lewallen, W7EL

2941. Re: Cushcraft R5/R7 Matching Network (MN-7) Rebuild

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 20:03:12 UTC
From: Jim-NN7K
Message-ID: <40rVi.37772$eY.4603@newssvr13.news.prodigy.net>
Source record: 34873

Might try this page (from EI7BA)- Lots easier to read!

http://www.iol.ie/~bravo/r7_vertical.htm
And think should act the same, electrically, Jim NN7K

gb wrote:
> This article describes how to rebuild a matching unit of a Cushcraft R5
> vertical -- by --G0WCW
>
> http://www.mrs.bt.co.uk/mrs/r5/
>
> Nice work!
> http://www.mrs.bt.co.uk/mrs/r5/DSCN2478.JPG
> Enclosure
>
> The box is from maplin, product number YM91Y and is one of their 'IP
> enclosure' range. The box is 150 x 110 x 70mm in size (product codes YM91Y -
> grey, YM93B - grey with clear lid). Cost is around six UK pounds.
>
> It is physically the same size as the Cushcraft variant, but the PCB has
> to be slightly 'nibbled' at the corners to get it to fit inside the newer
> box. I'd say the original Cushcraft enclosure isn't that good as they used
> steel screws into brass fixings. The screws rust over and then shear off. In
> my view, the Maplin IP enclosure is a better solution to outdoor use (IP56
> rated).
>
>
>

2942. Re: Cushcraft R5/R7 Matching Network (MN-7) Rebuild (more)

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 20:12:20 UTC
From: Jim-NN7K
Message-ID: <E8rVi.37774$eY.6501@newssvr13.news.prodigy.net>
Source record: 34874

Jim-NN7K wrote:

Also, for repair of the traps them selfs, check out

http://www.telusplanet.net/public/telwest/R7/cushcraft_trap.htm

> Might try this page (from EI7BA)- Lots easier to read!
>
> http://www.iol.ie/~bravo/r7_vertical.htm
> And think should act the same, electrically, Jim NN7K
>
>
> gb wrote:
>> This article describes how to rebuild a matching unit of a Cushcraft
>> R5 vertical -- by --G0WCW
>>
>> http://www.mrs.bt.co.uk/mrs/r5/
>>
>> Nice work!
>> http://www.mrs.bt.co.uk/mrs/r5/DSCN2478.JPG
>> Enclosure
>>
>> The box is from maplin, product number YM91Y and is one of their 'IP
>> enclosure' range. The box is 150 x 110 x 70mm in size (product codes
>> YM91Y - grey, YM93B - grey with clear lid). Cost is around six UK pounds.
>>
>> It is physically the same size as the Cushcraft variant, but the PCB
>> has to be slightly 'nibbled' at the corners to get it to fit inside
>> the newer box. I'd say the original Cushcraft enclosure isn't that
>> good as they used steel screws into brass fixings. The screws rust
>> over and then shear off. In my view, the Maplin IP enclosure is a
>> better solution to outdoor use (IP56 rated).
>>
>>
>>

2943. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 20:28:15 UTC
From: nm5k@wt.net
Message-ID: <1193689695.773244.116860@o38g2000hse.googlegroups.com>
Source record: 34875

On Oct 29, 11:20 am, art <aun...@insightbb.com> wrote:
> On 29 Oct, 09:32, n...@wt.net wrote:
>
> > On Oct 29, 8:31 am, art <aun...@insightbb.com> wrote:
>
> > > Cecil, people have stopped calling me a blithering idiot!
>
> > After a while it gets boring... :/
> > MK
>
> Stick to making loads and top hats for mobile anttenas.
> You are out of your league on this one
> Art

You got that right... :/
MK

2944. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 20:44:34 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193690674.304475.147620@o80g2000hse.googlegroups.com>
Source record: 34876

On 29 Oct, 11:10, "Dave" <no...@nowhere.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1193679501.655956.101900@o3g2000hsb.googlegroups.com...
>
>
>
>
>
> > On 29 Oct, 08:45, "Dave" <no...@nowhere.com> wrote:
> >> "art" <aun...@insightbb.com> wrote in message
>
> >>news:1193671653.357526.76540@k79g2000hse.googlegroups.com...
>
> >> > On 29 Oct, 08:08, "Dave" <no...@nowhere.com> wrote:
> >> >> "art" <aun...@insightbb.com> wrote in message
>
> >> >>news:1193664360.300374.56140@y42g2000hsy.googlegroups.com...
>
> >> >> > The DC blast removes the surface particles and in this moment where
> >> >> > equilibrium does not exist the static particles are projected beyond
> >> >> > the boundary before the boundary shape
> >> >> > is repaired. Have you got your mind in the thinking mode yet?Now
> >> >> > what
> >> >> > does the blast consist of when energy is released nfrom a capacitor
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> >> >> > Art Unwin KB9MZ....XG
>
> >> >> ah, a blast removes the particles... you know how much of a 'blast' is
> >> >> required to create corona on a wire the way you describe? what
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> >> >> field strength at the surface of a conductor is required to create
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> >> >> of breakdown in air?
>
> >> > A battery, a flyback transformer etc etc
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> >> > Does not require a vacuum. Remember the old days of spark plug
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> >> > define your terms and show all
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> >> >> what happens if i build a capacitor with ferromagnetic material???
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> >> >> it
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> >> > David turn your attention to antenna computor programs
> >> > When made they made assumptions which is a no, no with laws.
> >> > The same computor program produces verification of the model!
> >> > So why not think about whether computor programs are incorrectly based
> >> > or Maxwells laws has some errors. Start your investigation from a
> >> > rock
> >> > hard surface and not sand which has a habit of drifting in time and
> >> > determine
> >> > or verify again Maxwells laws and computor programming basics.
> >> > Is science back to the poll taking days for verification?
> >> > Stop floundaring and get down to serious thinking since memorising
> >> > stuff is not getting the job done as it did in college.
> >> > Art KB9MZ.....XG
>
> >> why should i believe you, you just said that a capacitor with iron plates
> >> can't work which is provably wrong.
> > David you have now found something to invest in
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> > With the sky rocketing costs of aluminium and copper e.t.c
> > now is the time to get in on ferrite capacitors.
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>
> > your understanding of computer modeling
> >> of antennas is similarly flawed.- Hide quoted text -
>
> > I just buy the commercial programs on the assumption
> > they are not selling me junk. If the results are in
> > accordance with Maxwells laws then that is fineby me.
> > Art KB9MZ......XG
>
> >> - Show quoted text -

>
> ok, so where in maxwells laws does the magnetic properties of the capacitor
> plates affect how it works?- Hide quoted text -
>
> - Show quoted text -

David,
Your questions go on and on as if you have never taken physics!
To get up to speed you need to take some classes and maybe ask
your lecturer some of the questions that you are asking of me.
Until then start a business making ferrite capacitors which you
say work instead of high priced aluminum. Perhaps start an IPO
and get your money up front since you have proof you can make
it work.Why not join your buddy KB9.... and get on his thread
then overnight you will become an expert, relative that is to
those that you join
Art Unwin KB9MZ...xg

2945. Re: question about wire antenna and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 21:29:00 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fg5jao$kn8$1@news.service.uci.edu>
Source record: 34877

Cecil Moore wrote:
> Tam/WB2TT wrote:
>
>> What it really is is an impedance matching network. You adjust the
>> antenna tuner so that the transmitter sees 50 Ohms. If your SWR meter
>> is calibrated for 50 Ohms, that means an SWR of 1:1 (between the tuner
>> and the radio).
>
>
> Yes, and that is a Z0-match to 50 ohms. What happens
> at a Z0-match is wave cancellation of reflected waves
> through destructive interference which redistributes
> the reflected energy back toward the antenna in the
> form of constructive interference energy that joins
> the forward wave.

Correct, except for the part about destructive interference
redistributing reflected energy. Please note the absence of any such
claim in the cited (or any other) reference.

> micro.magnet.fsu.edu/primer/java/scienceopticsu/interference/waveinteractions/index.html
>
>
> "... when two waves of equal amplitude and wavelength that are
> 180-degrees ... out of phase with each other meet, they are not actually
> annihilated, ... All of the photon energy present in these waves must
> somehow be recovered or redistributed in a new direction, according to
> the law of energy conservation ... Instead, upon meeting, the photons
> are redistributed to regions that permit constructive interference, so
> the effect should be considered as a redistribution of light waves and
> photon energy rather than the spontaneous construction or destruction of
> light."

One addendum:
"Therefore, simple diagrams, such as the one illustrated in Figure 1,
should only be considered as tools that assist with the calculation of
light energy traveling in a specific direction."

The same holds true for the simplified explanation provided by the site.

> The reason that the transmitter is protected is that
> the Z0-match *causes* that redistribution of the reflected
> energy back toward the antenna.

More to the point, the Z-match reflects energy back toward the antenna.

73, ac6xg

2946. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 22:10:11 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fg5lo5$9en$1@aioe.org>
Source record: 34878

"art" wrote (but not to me):
> Your questions go on and on as if you have never taken physics!
> To get up to speed you need to take some classes and maybe ask
> your lecturer some of the questions that you are asking of me.

Art --

If you believe that either physics or accumulated field experience supports your belief that "efficient" antennas need to be "tank circuits" where "The DC blast removes the surface particles and in this moment where equilibrium does not exist the static particles are projected beyond the boundary before the boundary shape is repaired," etc etc, then please post proven mathematical support for your concepts -- whether your own, or that of others. Your intuition alone is not sufficient.

And if you can't, then would you not agree that you should NOT be posting such concepts as proven reality, whilst abusing others who doubt and/or ask for proof of your concepts, and misleading those who might believe what you post, without proof of its accuracy?

RF

2947. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 22:25:41 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193696741.978637.16110@d55g2000hsg.googlegroups.com>
Source record: 34881

On 29 Oct, 15:10, "Richard Fry" <r...@adams.net> wrote:
> "art" wrote (but not to me):> Your questions go on and on as if you have never taken physics!
> > To get up to speed you need to take some classes and maybe ask
> > your lecturer some of the questions that you are asking of me.
>
> __________
>
> Art --
>
> If you believe that either physics or accumulated field experience supports
> your belief that "efficient" antennas need to be "tank circuits" where
> "The DC blast removes the surface particles and in this moment
> where equilibrium does not exist the static particles are projected beyond
> the boundary before the boundary shape is repaired," etc etc, then
> please post proven mathematical support for your concepts -- whether
> your own, or that of others. Your intuition alone is not sufficient.
>
> And if you can't, then would you not agree that you should NOT be
> posting such concepts as proven reality, whilst abusing others who
> doubt and/or ask for proof of your concepts, and misleading those
> who might believe what you post, without proof of its accuracy?
>
> RF

Just read the archives to get what you want instead of
getting personal attention. I am certainly not going to
start at the beginning again just for you.
The mathematical support is all there.
If you don't understand the math then you should
not jump to conclusions about who is misleading who.
Just get off my back .

2948. Re: Distance between beams

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 22:43:56 UTC
From: Barrett <barrett@blueyounder.co.uk>
Message-ID: <MmtVi.122517$lV4.37610@fe2.news.blueyonder.co.uk>
Source record: 34882

Ralph, was the 21 foot tube you used steel or alloy?

"Ralph Mowery" <rmowery28146@earthlink.net> wrote in message
news:13icmndsgu2sn9d@corp.supernews.com...
>
> "Barrett" <barrett@blueyounder.co.uk> wrote in message
> news:gxnVi.461388$xp6.166077@fe3.news.blueyonder.co.uk...
>>I have one last question.
>>
>> I an using a home made tilt over mast made up of aluminium scaffold tube
>> (2" OD heavy duty) and the same tube for the stub mast. I have two heavy
>> duty brackets made up that clamp onto the scaffold tube to hold the
>> rotator and support bearing in place.
>>
>> What would be a good average distance to have between the brackets that
>> hold the rotator and bearing?
>>
>> Thanks
>>
> I don't have any idea. I just put my rotator mounting plate where it fit
> the bracing in the tower. That put about 5 or 6 feet of a 21 foot piece
> of 2 inch OD (1 1/2 trade size of galvinised pipe. I just based that on
> where the plate fit and having enough pipe in the tower were I can pull
> the rotator out if it needs repair.
>
>
>

2949. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 22:50:59 UTC
From: Richard Fry <rfry@adams.net>
Message-ID: <fg5o4lfqr1@aioe.org>
Source record: 34883

"art" <aunwin@insightbb.com> wrote
in message news:1193696741.978637.16110@d55g2000hsg.googlegroups.com...
>Just read the archives to get what you want instead of
>getting personal attention. I am certainly not going to
>start at the beginning again just for you.
>The mathematical support is all there.

Wrong. I've read your archives.

The mathematical PROOFS of the beliefs you espouse are not to be found
or linked there -- either from your direct efforts, or those of any other
source.

RF

2950. Re: Distance between beams

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 23:12:56 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13icmndsgu2sn9d@corp.supernews.com>
Source record: 34879

"Barrett" <barrett@blueyounder.co.uk> wrote in message
news:gxnVi.461388$xp6.166077@fe3.news.blueyonder.co.uk...
>I have one last question.
>
> I an using a home made tilt over mast made up of aluminium scaffold tube
> (2" OD heavy duty) and the same tube for the stub mast. I have two heavy
> duty brackets made up that clamp onto the scaffold tube to hold the
> rotator and support bearing in place.
>
> What would be a good average distance to have between the brackets that
> hold the rotator and bearing?
>
> Thanks
>
I don't have any idea. I just put my rotator mounting plate where it fit
the bracing in the tower. That put about 5 or 6 feet of a 21 foot piece of
2 inch OD (1 1/2 trade size of galvinised pipe. I just based that on
where the plate fit and having enough pipe in the tower were I can pull the
rotator out if it needs repair.

2951. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 23:15:53 UTC
From: Dave <noone@nowhere.com>
Message-ID: <JQtVi.2404$mv.1453@trndny08>
Source record: 34884

"art" <aunwin@insightbb.com> wrote in message
news:1193690674.304475.147620@o80g2000hse.googlegroups.com...

> David,
> Your questions go on and on as if you have never taken physics!
> To get up to speed you need to take some classes and maybe ask
> your lecturer some of the questions that you are asking of me.
> Until then start a business making ferrite capacitors which you
> say work instead of high priced aluminum. Perhaps start an IPO
> and get your money up front since you have proof you can make
> it work.Why not join your buddy KB9.... and get on his thread
> then overnight you will become an expert, relative that is to
> those that you join
> Art Unwin KB9MZ...xg
>

again you show your ignorance and try to twist words... i said nothing about 'ferrite' in capacitors, i asked you how to explain why ferromagnetic material as capacitor plates wouldn't work, then asked for the equation reference to show where that effect existed in maxwells laws... which you like to say are correct, but then insist on adding other effects to them that aren't needed nor correct.

2952. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 23:17:34 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13icn04c3th72e0@corp.supernews.com>
Source record: 34880

"Michael Coslo" <mjc5@psu.edu> wrote in message > I've been pleased so far. I worked some CA QSO party from the middle of
> PA on 20 meters with it, and all I could hear I could work (100 watts)

While you can not work a station if you can not hear it, that is no way to compair an antenna. I have an off center fed antenna up 45 feet and a tribander up 57 feet. I can hear more on the beam than I can on the OCF . I can probably work all I can hear on either antenna. It is I just hear beter on the beam on the bands it is cut for.

2953. Re: question about wire antenna and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-29 23:39:08 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <wauVi.3562$Nz7.2019@nlpi070.nbdc.sbc.com>
Source record: 34885

Jim Kelley wrote:
> Correct, except for the part about destructive interference
> redistributing reflected energy. Please note the absence of any such
> claim in the cited (or any other) reference.

Please note the presence of constructive interference in
the cited reference: "... the photons are redistributed to
regions that permit constructive interference ...", which
implies an equal magnitude of destructive interference
elsewhere in order to avoid violating the conservation of
energy principle. It is akin to the gain of an antenna.
Constructive interference in one direction is matched
by an equal magnitude of destructive interference in
another direction.

> More to the point, the Z-match reflects energy back toward the antenna.

Yes, as "constructive interference" energy which requires
destructive interference elsewhere to balance the
energy equation. Since there are only two directions
available in a transmission line, any constructive
interference toward the load must be balanced by an
equal magnitude of destructive interference toward the
source.

Quoting Reflections II, by Walter Maxwell, page 4-3:
"The destructive wave interference between these two
complementary waves causes a complete cancellation of
energy flow in the direction toward the generator.
Conversely, the constructive wave interference produces
an energy maximum in the direction toward the load,
resulting from the sum of the two reflected waves
and the source wave."

For a non-reflective thin film coating, these two
reflected waves are known as the internal reflection
and the external reflection.
--
73, Cecil http://www.w5dxp.com

2954. Re: question about wire antenna and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 00:18:26 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fg5t87$16b$1@news.service.uci.edu>
Source record: 34886

Cecil Moore wrote:
> Jim Kelley wrote:
>
>> Correct, except for the part about destructive interference
>> redistributing reflected energy. Please note the absence of any such
>> claim in the cited (or any other) reference.
>
>
> Please note the presence of constructive interference in
> the cited reference: "... the photons are redistributed to
> regions that permit constructive interference ...", which
> implies an equal magnitude of destructive interference
> elsewhere in order to avoid violating the conservation of
> energy principle. It is akin to the gain of an antenna.
> Constructive interference in one direction is matched
> by an equal magnitude of destructive interference in
> another direction.

>> More to the point, the Z-match reflects energy back toward the antenna.
>
>
> Yes, as "constructive interference" energy which requires
> destructive interference elsewhere to balance the
> energy equation. Since there are only two directions
> available in a transmission line, any constructive
> interference toward the load must be balanced by an
> equal magnitude of destructive interference toward the
> source.
>
> Quoting Reflections II, by Walter Maxwell, page 4-3:
> "The destructive wave interference between these two
> complementary waves causes a complete cancellation of
> energy flow in the direction toward the generator.
> Conversely, the constructive wave interference produces
> an energy maximum in the direction toward the load,
> resulting from the sum of the two reflected waves
> and the source wave."
>
> For a non-reflective thin film coating, these two
> reflected waves are known as the internal reflection
> and the external reflection.

Physical objects redistribute energy. Interference simply describes
its spacial distribution.

73, ac6xg

2955. Bird Wattmeter for sale

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 00:46:08 UTC
From: Henry <wa0goz@arrl.net>
Message-ID: <H6adnfPB8I9U47vanZ2dnUVZ_gadnZ2d@comcast.com>
Source record: 34888

I have a model 43 Bird wattmeter with a 250 watt, 2-30 MHz slug in excellent condition.

I am asking $225 plus shipping CONUS.

Thanks

Henry WA0GOZ

2956. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 01:13:30 UTC
From: nm5k@wt.net
Message-ID: <1193706810.484688.243670@50g2000hsm.googlegroups.com>
Source record: 34889

On Oct 29, 11:51 am, Michael Coslo <m...@psu.edu> wrote:

>
> It is narrow, but that's only been a big problem on 80.

I've seen some on 80 where the people would tune them
at driving speeds because the leaning back of the antenna
would detune far enough to be a problem. :/
They didn't have a wide enough bandwidth to really get
both positions with a good match. Good performing
antenna though.
How well mine does depends on the path, distance, etc..
On 40m, mine will beat my dipole which is at 35-40 ft
on paths over about 1000 miles or so late at night.
IE: Houston to Florida.
We tested that many times to make sure it was not
a fluke. I have no trouble on 80, but it also varies with
time of day, distance. It's probably at it's worst real early
in the evening to close NVIS range stations. But as it gets
later, it will usually get better and better once the band gets
stable and stretches out a bit. As usual, the longer the path,
the better it might do vs a med height dipole.
But I'm often pretty strong even to NVIS range stations.
Not uncommon to be over S 9.. Sometimes 10-20 over..
Course, all the guys on dipoles might be hitting them at
30-40 over.. :/ But no problem talking. And I've never run
an amp mobile.. Just 100w..
MK

2957. Re: Distance between beams

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 01:21:05 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13icu7mfd28pt33@corp.supernews.com>
Source record: 34887

"Barrett" <barrett@blueyounder.co.uk> wrote in message
news:MmtVi.122517$lV4.37610@fe2.news.blueyonder.co.uk...
> Ralph, was the 21 foot tube you used steel or alloy?
>

I don't know what kind of pipe it is. I went to a place that sells metal and told them I wanted some galvinised pipe. One piece 1 1/2 inch trade size about 20 feet long and also to support the tower I got 3 pieces that are about 3 or 4 inches in diameter and 9 feet long. Those were for the guy wires. I put around 4 feet of the pipes in the ground and filled them with cement. Hopefully that will keep them from bending over. The tower is guyed around 30 feet and again near the top. It is also in a yard of cement. More or less to Rhon's specs for a 25G tower. I bought the tower sections used. Think it was the least expensive part of the whole thing..

Here are a few pix of the tower.

http://home.earthlink.net/~ku4pt/images/

2958. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 01:34:53 UTC
From: catfuel <catfuel@tds.net>
Message-ID: <1TvVi.39653$G23.17169@newsreading01.news.tds.net>
Source record: 34890

What are you expecting for birds? Condors?? The old TVRO dishes were for 2-4 ghz I think. If you used it for 10 ghz work it would have incredible gain. The surface would have to be extremely smooth as even minor imperfections woulg be bad for 10 ghz use. I saw an article that a group used a 10' 1nd a 12' dish to go 125 miles over the desert with 802.11b wireless (wireless computer network if you're not a computer person like myself). I have a smaller 4'x6' dish I want to mount on my tower someday so I can screw around on the microwave bands. I live on a mountaintop in Vermont which makes it easier to get out on the upper bands that way. Have fun with it and don't stop dreaming of the possibilities. 73's de KA1LHZ

Dave Typinski wrote:
> Anyone have any ideas about what one might do with a television
> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
> for the price of dismantling it and hauling it out of the present
> owner's back yard.
>
> I'm thinking radio astronomy. Might be nice to make my own radio map
> of the galaxy. I'm guessing that this would work okay somewhere
> between 1 and 10 GHz... which means making a feed horn... which is
> easy enough to do.
>
> What else could I do with this antenna? Other than covering it in
> polyethylene sheet to make a really big bird bath...

2959. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 01:40:28 UTC
From: catfuel <catfuel@tds.net>
Message-ID: <gYvVi.39654$G23.31547@newsreading01.news.tds.net>
Source record: 34741

Jim Lux wrote:
> Dave Typinski wrote:
>> On Sun, 21 Oct 2007 01:01:19 -0400, "Jimmie D"
>> <GFENDER@carolina.rr.com> wrote:
>>
>>> "Dave Typinski" <nospam@nospam.net> wrote in message
>>> news:healh31jpubrjgeoah24p0jjg2ku8b0u1u@4ax.com...
>>>
>>>> Anyone have any ideas about what one might do with a television
>>>> receive-only (TVRO) antenna? The thing is 10' diameter and it's mine
>>>> for the price of dismantling it and hauling it out of the present
>>>> owner's back yard.
>>>>
>>>> I'm thinking radio astronomy. Might be nice to make my own radio map
>>>> of the galaxy. I'm guessing that this would work okay somewhere
>>>> between 1 and 10 GHz... which means making a feed horn... which is
>>>> easy enough to do.
>>>>
>>>> What else could I do with this antenna? Other than covering it in
>>>> polyethylene sheet to make a really big bird bath...
>>>> --
>>>> Dave Typinski
>>>> AJ4CO
>>>
>>> I know of a couple of guys that took two of them, one for rx and one
>>> for tx, tx was a microwave oven mgnetron. He and his frined talked to
>>> each other via troposcatter. I do know if a maggie operates within a
>>> ham band or not but it didnt matter too much for these guys because
>>> they didnt have a ticket anyway.
>>>
>>> Jimmie
>>
>>
>> I thought about magnetrons... but not for communication. My idea is
>> to set it up as a radar station to measure the distance to the Moon. A
>> microwave oven magnetron operates at 2450 MHz, which is right at the
>> upper edge of the 13cm ham band. Unfortunately, magnetrons produce a
>> really dirty, wide output. Worse, being right at the edge of the
>> band, half the RF energy would be out of band.
>
> Just how precise a measurement do you want to make? You could do quite
> well using a 100W 2m SSB rig and a decent yagi antenna and some signal
> processing software.
>

> See, e.g. http://home.earthlink.net/~n5bf/eme2.html
>
>
>
>
>>
>> I don't know if one can re-tune a magnetron by the addition of
>> external components; I'd like to get the thing down to 2.42 GHz to put
>> the emission in the center of the 13cm band. There are such things as
>> tunable magnetrons; but, they aren't found in microwave ovens, which
>> means they won't likely be had for free.
>>
>> That said, I'd sure like to look at the output from an oven magnetron
>> with a spectrum analyzer. Maybe the output isn't as dirty and wide as
>> I think it is.
>
> it is quite dirty, even more so in an oven because:
> 1) it's fed by a half wave voltage doubler, so it's pulsed at line
> frequency
> 2) the voltage waveform is hardly nice and regulated
> 3) the temperature of the tube changes during operation
>
>
> Why not build/buy some small no-tune transverters for 3.4 or 5.7 GHz and
> use those. At least then, you can do coherent processing over some
> reasonable time span, and what you lose in raw pulse power, you pick up
> in processing gain.
>
> The beamwidth of your 10ft dish at 2.4 GHz is going to be pretty wide,
> so you're illuminating a lot more than the moon (which is wasted power).
>
> In absolute terms, on receive, the fraction of the signal power received
> from that power which hits the moon will be the same (same physical
> aperture.. gain in dBi is larger, but that's just because an isotrope
> has smaller aperture at higher frequencies).
>
> So, your goal should be to illuminate JUST the moon (and a bit more to
> cover pointing errors). Beamwidth is approximately = 70*wavelength/d.
>
> So
> GHz m deg dBi
> 2.4 0.125 2.9 35
> 3.4 0.088 2.0 38
> 5.7 0.053 1.2 43
>
> Given that you want to light up the moon with the same power, at 2.4 GHz
> it will take 8 dB more than 5.7 GHz.
>
> Since the moon is about 1/2 degree wide, even 5.7 GHz is a bit low for a
> 10 foot reflector.

>
>
> There's a little more than this to the whole problem, but, in general,
> if what you want to do is measure the distance to the moon, a radar
> built with an oven magnetron probably isn't the best way to go about
> doing it.
It's probably cheaper than buying a tape measure long enough to do the
trick... KA1LHZ

2960. Re: question about wire antenna and tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 02:23:45 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <RAwVi.17644$JD.4399@newssvr21.news.prodigy.net>
Source record: 34744

Jim Kelley wrote:
> Physical objects redistribute energy.

If you consider a Z01 to Z02 impedance discontinuity
to be a "physical object" then I agree.

> Interference simply describes its spacial distribution.

Interference, the noun event, is somewhere in the chain
of *events* between the reflections caused by the impedance
discontinuity and the spacial (re)distribution of energy.
Interference, the noun event, is a subset of superposition,
i.e. not all superposition results in interference.

Interference, the adjective, as in the "interference pattern",
describes the results of interference, the noun event. The
interference pattern describes the spacial distribution.

Maybe your answer to the following question will shed
some light on what you think is our disagreement.

In the RF fields in free space surrounding a dipole,
exactly where are the physical objects that redistribute
the energy? As I understand it, each segment is considered
to be a unit radiator and the radiation interference pattern
is the calculated result of the interference events in free
space in the far field.
--
73, Cecil http://www.w5dxp.com

2961. Re: Distance between beams

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 02:48:09 UTC
From: Bryan <bryan.swadenerNOSPAM@comcast.net>
Message-ID: <cNudnc3XXrBJE7vanZ2dnUVZ_jOdnZ2d@giganews.com>
Source record: 34742

Ralph Mowery wrote:
>
> Barrett wrote:
> > Ralph, was the 21 foot tube you used steel or alloy?
> >
>
> I don't know what kind of pipe it is. I went to a place that sells metal
> and told them I wanted some galvinised pipe. One piece 1 1/2 inch trade
> size about 20 feet long and also to support the tower I got 3 pieces that
> are about 3 or 4 inches in diameter and 9 feet long. Those were for the
guy
> wires. I put around 4 feet of the pipes in the ground and filled them
with
> cement. Hopefully that will keep them from bending over. The tower is
> guyed around 30 feet and again near the top. It is also in a yard of
> cement. More or less to Rhon's specs for a 25G tower. I bought the
tower
> sections used. Think it was the least expensive part of the whole thing..
>
> Here are a few pix of the tower.
>
> http://home.earthlink.net/~ku4pt/images/
>

Pipe is supplied in various "schedule" sizes, starting at 10. Common iron plumbing pipe is malleable (low carbon steel) and usually Schedule 40. So, what are the actual dimensions? Try here: http://www.engineersedge.com/pipe_schedules.htm. So, commonly available 1-1/2" (1.90" OD) Schedule 40 would have a 0.145" wall thickness.
Bryan WA7PRC

2962. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 03:00:21 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <47269e48$0$25693$4c368faf@roadrunner.com>
Source record: 34745

"art" <aunwin@insightbb.com> wrote in message
news:1193631730.671954.155520@o38g2000hse.googlegroups.com...
> On 28 Oct, 20:03, "Stefan Wolfe" <ste...@eml.com> wrote:

> Please take note that Maxwells equations verify this model
> I suggest you look up in the archives my research on Gauss
> since you are new to the group before you next want to invalidate
> Maxwell!!
> Regards
> Art

Art, I am not certain *physically* as to what happens when the RF energy, stored as AC discreet electrons in your tank circuit, is converted to the RF wave/photon energy in the EM wave emitted from your antenna. Maxwell describes "what" happens, not physically "how" it happens. You claim to describe physically "how" it happens and claim that your theory does not disagree with Maxwell. I can say that a supreme being from Xenu causes a rock to fall when I drop it from a cliff and that may not conflict with Newton. But the emission of electrons from any antenna of whatever magnetic properties, assuming it is even a conductor, does not meet basic science unless you are referring to corona which we are not. You have probably read that one can even construct a crude transmitter by rubbing a ping-pong ball on a carpet to induce a static charge on it and then move the resulting E-field it up and down. In that case we have a non-magnetic/non-metallic antenna producing an ELF EM radiowave of about 30 millions meters in wavelength. I do know that EM waves are composed of fields, not discreet electrons moving in space (whether we describe the phenomenon in terms of waves or photons). In response to your post, Maxwells equations are all about *fields*. These EM fields move at the speed of light. Electrons do not move at c. They cannot; it is physically impossible as you know. The electrons involved in creating the EM field are hardly even displaced along the length/surface of your antenna. I submit that, when your equipment generates an EM wave, the finite number of electrons that your tank circuit can hold, although extremely high, can in no way begin to approach the infinite number of receiving "antennas" (much less the number of "electrons" they could each "receive") in the whole universe that can and do receive your signal.

2963. Re: Distance between beams

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 03:04:16 UTC
From: Ralph Mowery <rmowery28146@earthlink.net>
Message-ID: <13id495ksiaci1c@corp.supernews.com>
Source record: 34743

"Bryan" <bryan.swadenerNOSPAM@comcast.net> wrote in message > Pipe is supplied in various "schedule" sizes, starting at 10. Common iron
> plumbing pipe is malleable (low carbon steel) and usually Schedule 40.
> So,
> what are the actual dimensions? Try here:
> http://www.engineersedge.com/pipe_schedules.htm. So, commonly available
> 1-1/2" (1.90" OD) Schedule 40 would have a 0.145" wall thickness.
> Bryan WA7PRC
>

It is Schedule 40 pipe..This is not the best pipe to use, but should be strong enough for me. The tribander is just over the top of the tower and I doubt the other antennas will have much wind load. I live in the middle of North Carolina so we do not usually get much ice or very high winds.

2964. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 04:16:19 UTC
From: art <aunwin@insightbb.com>
Message-ID: <1193717779.479810.97540@v3g2000hsg.googlegroups.com>
Source record: 34746

On 29 Oct, 20:00, "Stefan Wolfe" <ste...@eml.com> wrote:
> "art" <aun...@insightbb.com> wrote in message
>
> news:1193631730.671954.155520@o38g2000hse.googlegroups.com...
>
> > On 28 Oct, 20:03, "Stefan Wolfe" <ste...@eml.com> wrote:
> > Please take note that Maxwells equations verify this model
> > I suggest you look up in the archives my research on Gauss
> > since you are new to the group before you next want to invalidate
> > Maxwell!!
> > Regards
> > Art
>
> Art, I am not certain *physically* as to what happens when the RF energy,
> stored as AC discreet electrons in your tank circuit, is converted to the RF
> wave/photon energy in the EM wave emitted from your antenna. Maxwell
> describes "what" happens, not physically "how" it happens. You claim to
> describe physically "how" it happens and claim that your theory does not
> disagree with Maxwell. I can say that a supreme being from Xenu causes a
> rock to fall when I drop it from a cliff and that may not conflict with
> Newton. But the emission of electrons from any antenna of whatever magnetic
> properties, assuming it is even a conductor, does not meet basic science
> unless you are referring to corona which we are not. You have probably read
> that one can even construct a crude transmitter by rubbing a ping-pong ball
> on a carpet to induce a static charge on it and then move the resulting
> E-field it up and down. In that case we have a non-magnetic/non-metallic
> antenna producing an ELF EM radiowave of about 30 millions meters in
> wavelength. I do know that EM waves are composed of fields, not discreet
> electrons moving in space (whether we describe the phenomenon in terms of
> waves or photons). In response to your post, Maxwells equations are all
> about *fields*. These EM fields move at the speed of light. Electrons do not
> move at c. They cannot; it is physically impossible as you know. The
> electrons involved in creating the EM field are hardly even displaced along
> the length/surface of your antenna. I submit that, when your equipment
> generates an EM wave, the finite number of electrons that your tank
> circuit can hold, although extremely high, can in no way begin to approach
> the infinite number of receiving "antennas" (much less the number of
> "electrons" they could each "receive") in the whole universe that can and do
> receive your signal.

You have said a lot but it appears that for what ever reason you
reject what I submit.
So I give you one morsel to ponder upon. When you apply a time vary
field to a gaussian

static field the result is an equation that matches Maxwell(read
archives for the discussion on that)
Since static particles are in no way in planar form but it still
conforms to Maxwell
one should be able to insert into a antenna computor program with an
optimiser a radiator of some length
at an angle to the earths surface and ask for max vertical or
horizontal gain.
I did that and gave the optimizer response to this group for
verification by any computor program
they want to use. It was verified using NEC 4 and is in the archives.
So disregarding any "how radiation works" I will leave you and anybody
else to explain
1 When a time varying field is applied to a static field the resultant
equation is the same as Maxwells
2 when a non planar radiator as in a static field is inserted in a
program based on Maxwell's laws
it produces a result that is not planar and verified by other antenna
programs.
I welcome any response that explains why such a thing could happen
using established theory.
Forget the hand waving and address those two basic statements in a
scietific manner.
For starters, all of this group stated that you cannot add time to
both sides of the static
equation which put them all in opposition to anything that followed,
despite intervention
from a Doctor at MIT showing that I was correct in detailed
mathematical form
Why? Well it is just because.....no reasons given, just
because.
Your move
Art Unwin KB9MZ.....XG

2965. Re: Uses for a TVRO dish antenna?

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 06:22:21 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <y4AVi.23151$XU3.582@newsfe15.phx>
Source record: 34747

> > There's a little more than this to the whole problem, but, in general,
> > if what you want to do is measure the distance to the moon, a radar
> > built with an oven magnetron probably isn't the best way to go about
> > doing it.

Nobody asked me, but fooling around with oven magnetrons is potentially life threatening, since they are properly shielded only when installed as designed. What's cookin' might be _you_!

Most in this group know that, so I'm throwing out the caution for the possible newbie. (There was a rumor years ago about a guy who damaged his internal organs trying to use a magnetron as the LO for a homebrew TVRO satellite downconverter. I looked hard and could not find any sustantiation.)

2966. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 12:20:42 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
Message-ID: <4727135d$0$28850$4c368faf@roadrunner.com>
Source record: 34748

> It is the photons released by energy-rich electrons
> that flow at the speed of light. The EM wave energy
> is associated with those photons.

Wow, I do not know why, but I just had a moment of clarity.

That would make a Yagi's behavior somewhat laser like. Photons would excite a Yagi's element which would then eventually emit its own photon. I wonder if the excited photon would be emitted in the same plane as the received one.......Nahhhhh.

Chris

2967. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 12:28:08 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <srFVi.2011$yV6.217@newssvr25.news.prodigy.net>
Source record: 34749

Christopher Cox wrote:
> That would make a Yagi's behavior somewhat laser like. Photons would
> excite a Yagi's element which would then eventually emit its own photon.
> I wonder if the excited photon would be emitted in the same plane as the
> received one.......Nahhhhh.

The energized electrons in the driven element emit coherent
photons some of which are absorbed by electrons in the the
parasitic elements. The energized electrons in the parasitic
elements emit more coherent photons, some in phase and some
out of phase with the driven element photons. Coherent photons
interfere destructively in some places and constructively
in other places. The result is the radiation pattern of
the antenna.
--
73, Cecil http://www.w5dxp.com

2968. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 14:42:29 UTC
From: Paul <null@null.null>
Message-ID: <472742db$0$79901$742ec2ed@news.sonic.net>
Source record: 34750

"Roy Lewallen" <w7el@eznec.com> wrote in message
news:13iceav8cq5jib9@corp.supernews.com...
> Paul wrote:
>> I assume that you are talking about a length of coax that is attached to
>> a free-space antenna. What about the case where the coax shield is
>> grounded at both ends? (make it a non-ideal ground if you like.)
>> Wouldn't this create a ground-loop that will cause some of the signal
>> current to flow through the ground-connection, thus unbalancing the
>> center-conductor/shield current? In this case, the common-mode current
>> isn't necessarily flowing on the outside of the shield. (I am asking a
>> question here).
>
> A tricky part in answering this is determining what you mean by "shield
> current". There are separate and distinct currents on the inside and
> outside of the shield. I'll assume that by "shield current" you mean the
> vector sum of these two currents.
>
> The first part of the answer is that the current on the outside of the
> inner conductor is always equal to the current on the inside of the
> shield, and in the opposite direction (that is to say, they comprise a
> pure differential current), provided that the shield is at least several
> skin depths thick. This is a consequence of the confinement of the field
> by the shield, and has nothing to do with what we connect the cable to.
> Connections only impact the current on the outside.
>
> Now consider what happens when the coax is connected to a free-space
> dipole, for example. All the current from the center conductor flows into
> one half the dipole. But the current on the inside of the shield has two
> possible paths: to the other half of the dipole or around the end of the
> shield to the outside of the shield. I won't go into more detail about
> this, since I've already done so -- you can see what I've written at
> http://eznec.com/Amateur/Articles/Baluns.pdf.
>
> If you "ground" both ends of the coax, that is, connect them to conductors
> which provide another path between the two ends, you have a third path the
> inner shield can follow -- along the "ground" path. So it splits three
> ways instead of two. If you use a "pigtail" wire for grounding or
> connecting to the load, it adds inductance to the desired path to the
> load, which makes the path back along the outside of the coax more
> desirable, so you end up with more common mode current than you would with
> a low impedance connection.

Yes, this agrees with what I have been thinking, and what I was trying to
say.

>> Also, consider the case at frequencies low enough that skin-effect
>> doesn't apply. Here there is no inside or outside of the coax shield.
>> Still, the magnetic fields caused by imbalance between center-conductor
>> and shield currents are the same, with or without skin effect.
>
> I'm not sure I follow this. When the frequency gets low enough that the
> field can penetrate the shield, the line behaves more like a twinlead line
> behaves at HF. As I mentioned in my earlier posting, the line can still
> have common and differential mode currents -- they're just no longer
> physically separated.
>
> Grounding would be much easier to understand if people would realize that
> calling a conductor or connection "ground" doesn't impart magical
> qualities. And that currents flow wherever the impedance dictates.

Again, I agree. The reason I suggested a "non-ideal ground" was to de-magic it. We do need to recognize some non-zero impedances on the grounds and shields, and their connections, if we are to analyze how the current splits.

The reason for the low-frequency question is that on the boat installations I've been discussing, there are multiple signal sources and some very non-ideal grounds. The signal sources include DC (due to how the electrical equipment is usually wired), and relatively low frequency signals, sometimes carried on cables in very close proximity to the coax. There is also the RF field from the close-in antenna and RF grounding system. I've been stating that the coax shield does *not* provide a magic shield. Your comparison to twinlead at low frequencies (for current, and thus for inductive coupling), confirms what I have been saying. These superimposed low-frequency currents don't affect the RF situation, but they can affect the equipment itself.

Regards,
-Paul (wb6cxc)

2969. Re: Question on dipole SWR problem

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 16:58:32 UTC
From: ukmonitor@hotmail.com
Message-ID: <1193763512.536777.72160@z9g2000hsf.googlegroups.com>
Source record: 34751

Getting back to the original problem.

Most autotuners can't cope with impedances of less than 5 or 6 ohms.
As you are near that limit even a slight increase in antenna height
may facilitate correct tuning.

In order to improve the antenna balance and RX S/N ratio. Put a good
quality ferrite common mode chokes on the Coax and control cables
going into the tuner (I suggest either 50 ferrite beads over the coax
or 10 turns of coax on a ferrite ring as a minimum) If you wish to
earth the coax do it on the transmitter side of the choke. A few turns
of coax will not provide sufficient choking impedance at 3.8MHz.

The purpose of this is to 'float' the tuner above RF earth so that the
output apears to be balanced. By putting the choke on the input side
of the tuner, it is always working at a constant impedance thus
minimising losses.

UKM

On Oct 30, 2:42 pm, "Paul" <n...@null.null> wrote:
> "Roy Lewallen" <w...@eznec.com> wrote in message
>
> news:13iceav8cq5jib9@corp.supernews.com...
>
>
>
>
>
> > Paul wrote:
> >> I assume that you are talking about a length of coax that is attached to
> >> a free-space antenna. What about the case where the coax shield is
> >> grounded at both ends? (make it a non-ideal ground if you like.)
> >> Wouldn't this create a ground-loop that will cause some of the signal
> >> current to flow through the ground-connection, thus unbalancing the
> >> center-conductor/shield current? In this case, the common-mode current
> >> isn't necessarily flowing on the outside of the shield. (I am asking a
> >> question here).
>
> > A tricky part in answering this is determining what you mean by "shield
> > current". There are separate and distinct currents on the inside and
> > outside of the shield. I'll assume that by "shield current" you mean the
> > vector sum of these two currents.
>
> > The first part of the answer is that the current on the outside of the
> > inner conductor is always equal to the current on the inside of the

> > shield, and in the opposite direction (that is to say, they comprise a
> > pure differential current), provided that the shield is at least several
> > skin depths thick. This is a consequence of the confinement of the field
> > by the shield, and has nothing to do with what we connect the cable to.
> > Connections only impact the current on the outside.
>
> > Now consider what happens when the coax is connected to a free-space
> > dipole, for example. All the current from the center conductor flows into
> > one half the dipole. But the current on the inside of the shield has two
> > possible paths: to the other half of the dipole or around the end of the
> > shield to the outside of the shield. I won't go into more detail about
> > this, since I've already done so -- you can see what I've written at
> >http://eznec.com/Amateur/Articles/Baluns.pdf.
>
> > If you "ground" both ends of the coax, that is, connect them to conductors
> > which provide another path between the two ends, you have a third path the
> > inner shield can follow -- along the "ground" path. So it splits three
> > ways instead of two. If you use a "pigtail" wire for grounding or
> > connecting to the load, it adds inductance to the desired path to the
> > load, which makes the path back along the outside of the coax more
> > desirable, so you end up with more common mode current than you would with
> > a low impedance connection.
>
> Yes, this agrees with what I have been thinking, and what I was trying to
> say.
>
> >> Also, consider the case at frequencies low enough that skin-effect
> >> doesn't apply. Here there is no inside or outside of the coax shield.
> >> Still, the magnetic fields caused by imbalance between center-conductor
> >> and shield currents are the same, with or without skin effect.
>
> > I'm not sure I follow this. When the frequency gets low enough that the
> > field can penetrate the shield, the line behaves more like a twinlead line
> > behaves at HF. As I mentioned in my earlier posting, the line can still
> > have common and differential mode currents -- they're just no longer
> > physically separated.
>
> > Grounding would be much easier to understand if people would realize that
> > calling a conductor or connection "ground" doesn't impart magical
> > qualities. And that currents flow wherever the impedance dictates.
>
> Again, I agree. The reason I suggested a "non-ideal ground" was to de-magic
> it. We do need to recognize some non-zero impedances on the grounds and
> shields, and their connections, if we are to analyze how the current splits.
>
> The reason for the low-frequency question is that on the boat installations
> I've been discussing, there are multiple signal sources and some very
> non-ideal grounds. The signal sources include DC (due to how the electrical
> equipment is usually wired), and relatively low frequency signals, sometimes
> carried on cables in very close proximity to the coax. There is also the RF

> field from the close-in antenna and RF grounding system. I've been stating
> that the coax shield does *not* provide a magic shield. Your comparison to
> twinlead at low frequencies (for current, and thus for inductive coupling),
> confirms what I have been saying. These superimposed low-frequency currents
> don't affect the RF situation, but they can affect the equipment itself.
>
> Regards,
> -Paul (wb6cxc)- Hide quoted text -
>
> - Show quoted text -

2970. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 17:00:58 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fg7o18srj2@news.service.uci.edu>
Source record: 34752

Cecil Moore wrote:

> Coherent photons
> interfere destructively in some places and constructively
> in other places.

What can you tell us of the incoherent ones? :-)

73, ac6xg

2971. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 17:24:37 UTC
From: "H. Adam Stevens" <hstevens@totalaccess.net>
Message-ID: <13ieq6pbn73ob6d@corp.supernews.com>
Source record: 34754

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:srFVi.2011$yV6.217@newssvr25.news.prodigy.net...
> Christopher Cox wrote:
>> That would make a Yagi's behavior somewhat laser like. Photons would
>> excite a Yagi's element which would then eventually emit its own photon.
>> I wonder if the excited photon would be emitted in the same plane as the
>> received one.......Nahhhhh.
>
> The energized electrons in the driven element emit coherent
> photons some of which are absorbed by electrons in the the
> parasitic elements. The energized electrons in the parasitic
> elements emit more coherent photons, some in phase and some
> out of phase with the driven element photons. Coherent photons
> interfere destructively in some places and constructively
> in other places. The result is the radiation pattern of
> the antenna.
> --
> 73, Cecil http://www.w5dxp.com

"coherent photons"

It's a laser?
Cool.

2972. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 17:34:21 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1193765661.043671.5530@z24g2000prh.googlegroups.com>
Source record: 34755

On Oct 30, 10:00 am, Jim Kelley <jwkel...@uci.edu> wrote:
> Cecil Moore wrote:
> > Coherent photons
> > interfere destructively in some places and constructively
> > in other places.
>
> What can you tell us of the incoherent ones? :-)
>
> 73, ac6xg

You mean the ones that have had too much cheap rum? Wait till the next day and ask them when they have a throbbing hangover.

One advantage, at typical ham frequencies, is that you'll have plenty of them, though you may have a hard time distinguishing one from another.

2973. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 18:14:47 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
Message-ID: <4727667c$0$16496$4c368faf@roadrunner.com>
Source record: 34753

> The energized electrons in the driven element emit coherent
> photons some of which are absorbed by electrons in the the
> parasitic elements. The energized electrons in the parasitic
> elements emit more coherent photons, some in phase and some
> out of phase with the driven element photons. Coherent photons
> interfere destructively in some places and constructively
> in other places. The result is the radiation pattern of
> the antenna.

Thinking from my "Imagination", it would be cool to find a way to "pump"
the parasitic element to emit a companion photon much like the one
emitted from a atom in a lasing medium.

2974. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 19:31:42 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fg80so$8lk$1@news.service.uci.edu>
Source record: 34756

K7ITM wrote:
> On Oct 30, 10:00 am, Jim Kelley <jwkel...@uci.edu> wrote:
>
>>Cecil Moore wrote:
>>
>>>Coherent photons
>>>interfere destructively in some places and constructively
>>>in other places.
>>
>>What can you tell us of the incoherent ones? :-)
>>
>>73, ac6xg
>
>
> You mean the ones that have had too much cheap rum? Wait till the
> next day and ask them when they have a throbbing hangover.
>
> One advantage, at typical ham frequencies, is that you'll have plenty
> of them, though you may have a hard time distinguishing one from
> another.

It's photobigotry. That's why those coherent ones gotta 'stick
together'. :-)

73, ac6xg

2975. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 19:45:48 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <MRLVi.15918$ID6.11232@newssvr27.news.prodigy.net>
Source record: 34757

Jim Kelley wrote:
> Cecil Moore wrote:
>> Coherent photons
>> interfere destructively in some places and constructively
>> in other places.
>
> What can you tell us of the incoherent ones? :-)

They are a lot like physics professors, i.e. hard to
understand? :-)

As far as RF goes, photons from a single source are
considered to be coherent with each other but not
coherent with any other photons. Photons can only
interfere with other photons with which they are
coherent.

For two incoherent light waves, the irradiance equation
is Itotal = I1 + I2, i.e. no interference term. For two
coherent waves, the irradiance equation is
Itotal = I1 + I2 + 2*SQRT(I1*I2)cos(A).
The extra term in the coherent irradiance equation is
the *interference term* where A is the phase angle
between the fields.

Have you figured out where the physical objects
are around a free-space dipole that cause the
radiation interference patterns?
--
73, Cecil http://www.w5dxp.com

2976. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 19:49:39 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <nVLVi.15921$ID6.13348@newssvr27.news.prodigy.net>
Source record: 34758

H. Adam Stevens wrote:
> "coherent photons" It's a laser? Cool.

Surprise! Our $100 RF transmitters emit coherent photons just
like a $100,000 laser. Maybe we should call them RASERs. :-)
Do you remember MASERs?
--
73, Cecil http://www.w5dxp.com

2977. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 19:53:19 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <PYLVi.15923$ID6.13566@newssvr27.news.prodigy.net>
Source record: 34759

Christopher Cox wrote:
> Thinking from my "Imagination", it would be cool to find a way to "pump"
> the parasitic element to emit a companion photon much like the one
> emitted from a atom in a lasing medium.

Are there any orbital electron energy step
functions that match RF frequencies?
--
73, Cecil http://www.w5dxp.com

2978. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 20:03:08 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fg82ls$r0k$1@f04n12.cac.psu.edu>
Source record: 34760

John Ferrell wrote:

>
> Last year I purchased a radio especially to go mobile. I have yet to
> find an acceptable mobile HF antenna to use on my Chrysler Minivan. I
> am beginning to believe that there are no acceptable solutions to the
> problem as I define it.

Then you need to change your definitions, John, -I mean that in a
friendly way. 8^)

Too often, too many time, we expect some sort of perfection. It isn't
going to happen. Mobile HF antennas are just not as efficient as a
"good" land based antenna. I'll leave the definition of good up to
everyone, suffice that the mobile antenna isn't as efficient as most.

That being said, you can have a lot of fun on HF mobile and can talk
around the world. Why let the needed compromises keep you from that?

If you are wanting to squeeze the last little bit of efficiency out of
your antenna, I would suggest a mid-loaded antenna with a capacity hat
on top somewhere (some say directly on top, but you'll have to put up
with a lot of wind loading) Use a loading coil that has as high a Q as
you can get, and bond everything you can in the van - doors, hood,
fenders, frame components, engine, radiator, exhaust system - and in
multiple places. You want as much ground plane as possible, even if at
best you don't get much.

> Further, I have concluded that ALL MOBILE HF installations are poor
> compared to a dipole five feet off the ground, some are just worse
> than others.

I don't think that is an exact comparison, but the question is so what?
Get as good as you can afford/want to put in th elabor, and go have fun

> The article simply sheds some light on the practical issues one
> encounters with popular alternatives.
>
> I think an auto tuner with whatever whip length one can tolerate is
> the best one can do with a Chrysler Minivan.

Don't agree there. You could use a bug catcher or screwdriver and be
better than that.

> Modeling programs do not consider the radiation from the loading coils
> but field measurements do.

> Tuner losses can be estimated from the software in the Arrl Antenna
> Books.
>
> If you can write a better article for QST, please do so. But please
> remember, most of us don't choose the ethical we drive because of its
> ability to carry a less bad radio antenna!

I'm driving a Suzuki Vitara -maybe the smallest SUV around. Yet I have an antenna that allows me to have a lot of fun and yes it does get some stares. If I put a football team pennant on it, everyone thinks I'm kewl.

AS for writing an article for QST, I don't think its a bad idea at all to be critical of an article that could have been written better. That I didn't write one does not mean that those who do have free reign to write a poor one if they like.

- 73 de Mike KB3EIA -

2979. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 20:05:14 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fg82rr$b72$1@news.service.uci.edu>
Source record: 34761

Cecil Moore wrote:

> Have you figured out where the physical objects
> are around a free-space dipole that cause the
> radiation interference patterns?

Can't say that I have. If it's not a physical object and yet it can be used to radiate electromagnetic waves, I'll have to rely on you to explain how it works.

73, ac6xg

2980. Re: Supposed comparison of Mobile HF Antennas in November QST

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 20:14:25 UTC
From: Michael Coslo <mjc5@psu.edu>
Message-ID: <fg83b1$r0o$1@f04n12.cac.psu.edu>
Source record: 34762

Ralph Mowery wrote:
> "Michael Coslo" <mjc5@psu.edu> wrote in message > I've been pleased so far.
> I worked some CA QSO party from the middle of
>> PA on 20 meters with it, and all I could hear I could work (100 watts)
>
> While you can not work a station if you can not hear it, that is no way to
> compair an antenna. I have an off center fed antenna up 45 feet and a
> tribander up 57 feet. I can hear more on the beam than I can on the OCF .
> I can probably work all I can hear on either antenna. It is I just hear
> beter on the beam on the bands it is cut for.

Its not meant to be a definitive test of the antenna, but I have used
some antennas where that was not the case, Hopefully this is not the
sort of group where one has to take their antenna to a range before they
are allowed to comment on it, good or bad.

I used it, and didn't have trouble making contacts. Others can determine
if it works or not according to their own guidelines.

- 73 de Mike KB3EIA -

2981. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 20:42:23 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <OGMVi.9711$Pv2.267@newssvr23.news.prodigy.net>
Source record: 34763

Jim Kelley wrote:
> Cecil Moore wrote:
>> Have you figured out where the physical objects
>> are around a free-space dipole that cause the
>> radiation interference patterns?
>
> Can't say that I have. If it's not a physical object and yet it can be
> used to radiate electromagnetic waves, I'll have to rely on you to
> explain how it works.

You didn't answer my simple question on another
thread. The question is: Can interference occur
in free space devoid of any of your required
physical objects?

Example: Given a cubic meter of free space
containing no physical objects. Can interference
occur within that space? Your earlier posting
implied that interference could not occur in
free space devoid of physical objects.
--
73, Cecil http://www.w5dxp.com

2982. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 20:53:30 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fg85mldma1@news.service.uci.edu>
Source record: 34764

Cecil Moore wrote:

> You didn't answer my simple question on another
> thread.

I don't want to get in another silly fight with you, Cecil. I'm evacuated from my house right now, and don't have a lot of patience to expend.

> The question is: Can interference occur
> in free space devoid of any of your required
> physical objects?

Not from one source of light without any physical objects to act as a reflecting surface.

73, ac6xg

2983. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 21:32:49 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <5qNVi.37881$eY.608@newssvr13.news.prodigy.net>
Source record: 34765

Jim Kelley wrote:
> I'm evacuated from my house right now,
> and don't have a lot of patience to expend.

I assume that is the result of the fire storm out
there in CA. The whole nation is praying for you guys.
When does the wet season start?

> Not from one source of light without any physical objects to act as a
> reflecting surface.

Can the physical objects be outside of the cubic
meter of space that is under consideration? If so,
I misunderstood your earlier posting. (If you say
"yes" they could be light-years outside the cubic
meter under consideration.)
--
73, Cecil http://www.w5dxp.com

2984. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 22:42:15 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fg8c3ekbc1@news.service.uci.edu>
Source record: 34766

Cecil Moore wrote:

> Jim Kelley wrote:
>
>> I'm evacuated from my house right now,
>> and don't have a lot of patience to expend.
>

> I assume that is the result of the fire storm out
> there in CA. The whole nation is praying for you guys.
> When does the wet season start?

Generally, never. We had 3 inches of rain last year. Soon though,
Diane Feinstein and Barbara Boxer will introduce punitive legislation
making it more difficult for people to live in (arid regions of)
Southern California - ostensibly to save Snail Darters in the
Sacramento delta. It's a kind of inedible fish I think.

>> Not from one source of light without any physical objects to act as a
>> reflecting surface.
>
>
> Can the physical objects be outside of the cubic
> meter of space that is under consideration? If so,
> I misunderstood your earlier posting. (If you say
> "yes" they could be light-years outside the cubic
> meter under consideration.)

I don't think it matters where it is, or how much space is involved.
For a single source to create an interferernce pattern, there must be
a reflector somewhere. An antenna tuner for example. Interference is
the result of the overlap of waves.

73, ac6xg

2985. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 23:01:07 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99DA65EAD6944nonenowhere@61.9.191.5>
Source record: 34767

Jim Kelley <jwkelley@uci.edu> wrote in news:fg8c3ekbc1
@news.service.uci.edu:

> I don't think it matters where it is, or how much space is involved.
> For a single source to create an interferernce pattern, there must be
> a reflector somewhere. An antenna tuner for example. Interference is
> the result of the overlap of waves.

Jim, could a diffractor or refractor provide the physical device that might
lead to interference?

Owen

2986. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 23:12:09 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fg8ds5$m4s$1@news.service.uci.edu>
Source record: 34768

Owen Duffy wrote:
> Jim Kelley <jwkelley@uci.edu> wrote in news:fg8c3ekbc1
> @news.service.uci.edu:
>
>
>>I don't think it matters where it is, or how much space is involved.
>>For a single source to create an interferernce pattern, there must be
>>a reflector somewhere. An antenna tuner for example. Interference is
>>the result of the overlap of waves.
>
>
> Jim, could a diffractor or refractor provide the physical device that might
> lead to interference?
>
> Owen

I'm am almost certain that you already know the answer to that
question, so I'm left to wonder why you are asking it.

Jim

2987. FA: MFJ-974 Balanced Line Tuner

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 23:36:35 UTC
From: afcsman <afcsman@hotmail.com>
Message-ID: <JuudnTtUBKiZXbranZ2dnUVZ_hGdnZ2d@comcast.com>
Source record: 34769

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=200168425941&ssPageName=STRK:MESE:IT&ih=010

Continuous 3.5-30 MHz, good for Amateur bands and serious SWL.

Rated 300 watts PEP, 150 watts CW, built-in Cross-Needle SWR/Power meter with 0-30 and 0-300 watt scales, measuring Average and Peak Power.

This tuner uses a T-network that is advertised to match 20-2000 ohm loads. Designed for Balanced Lines, it can also be configured for Coax lines and random long wires.

It might not "load the bedsprings," but should make your Xcvr happy in most other situations.

--W9NPI

2988. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-30 23:39:34 UTC
From: Owen Duffy <none@no.where>
Message-ID: <Xns99DA6C6F7EC86nonenowhere@61.9.191.5>
Source record: 34770

Jim Kelley <jwkelley@uci.edu> wrote in
news:fg8ds5$m4s$1@news.service.uci.edu:

>
>
> Owen Duffy wrote:
>> Jim Kelley <jwkelley@uci.edu> wrote in news:fg8c3ekbc1
>> @news.service.uci.edu:
>>
>>
>>>I don't think it matters where it is, or how much space is involved.
>>>For a single source to create an interferernce pattern, there must be
>>>a reflector somewhere. An antenna tuner for example. Interference
>>>is the result of the overlap of waves.
>>
>>
>> Jim, could a diffractor or refractor provide the physical device that
>> might lead to interference?
>>
>> Owen
>
> I'm am almost certain that you already know the answer to that
> question, so I'm left to wonder why you are asking it.

No, I am not certain, and in the interest of learning from you I am
questioning the generality of whether a reflector is the only means of
creating interference from a single source.

Owen

2989. Homebrew Handheld Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 02:51:07 UTC
From: maxpowervk@yahoo.com.au
Message-ID: <1193799067.228251.69060@q5g2000prf.googlegroups.com>
Source record: 34772

I am looking for plans to build some 70cm antennas for my handheld
radios. Cannot find much on the net. Has anybody on this forum built
their own, if so, how did they perform?
Any suggestions or pointers would be appreciated.
Cheers
Max

2990. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 03:33:08 UTC
From: Christopher Cox <chrisTOPHERcOX@coboxincORORATED.com>
Message-ID: <4727e948$0$32528$4c368faf@roadrunner.com>
Source record: 34771

Cecil Moore wrote:
> Christopher Cox wrote:
>
>> Thinking from my "Imagination", it would be cool to find a way to
>> "pump" the parasitic element to emit a companion photon much like the
>> one emitted from a atom in a lasing medium.
>
>
> Are there any orbital electron energy step
> functions that match RF frequencies?

Only ones I know of are in the nanometer range.

Big atom, big orbit!

2991. Re: requesting reception reports NDB beacon

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 03:42:24 UTC
From: radioguy73@gmail.com
Message-ID: <1193802144.580179.170130@o3g2000hsb.googlegroups.com>
Source record: 34773

Heard loud and clear in Southern Michigan, as early as 0019 UT and as late as 1047 UT on 28/October
during the Michigan Area Radio Enthusiasts DX Camp near Brighton MI. Equip consisted of a Drake SPR4 and 500 foot long wire antenna. VERY easy copy.

73 //Ken

On Sep 6, 11:00 pm, WA4...@gmail.com wrote:
> Greetings:
>
> Requesting reception reports on our new NDB beacon LYQ on 529 KHZ
> just below the AM broadcast band.
>
> Can you hear it??? What is your QTH???? please post reports
> here!!

2992. Re: requesting reception reports NDB beacon

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 03:43:06 UTC
From: radioguy73@gmail.com
Message-ID: <1193802186.126574.323210@d55g2000hsg.googlegroups.com>
Source record: 34774

Heard loud and clear in Southern Michigan, as early as 0019 UT and as late as 1047 UT on 28/October
during the Michigan Area Radio Enthusiasts DX Camp near Brighton MI. Equip consisted of a Drake SPR4 and 500 foot long wire antenna. VERY easy copy.

73 //Ken

On Sep 6, 11:00 pm, WA4...@gmail.com wrote:
> Greetings:
>
> Requesting reception reports on our new NDB beacon LYQ on 529 KHZ
> just below the AM broadcast band.
>
> Can you hear it??? What is your QTH???? please post reports
> here!!

2993. Re: Homebrew Handheld Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 03:58:13 UTC
From: Jimmie D <GFENDER@carolina.rr.com>
Message-ID: <4727fd52$0$25725$4c368faf@roadrunner.com>
Source record: 34775

<maxpowervk@yahoo.com.au> wrote in message
news:1193799067.228251.69060@q5g2000prf.googlegroups.com...
>I am looking for plans to build some 70cm antennas for my handheld
> radios. Cannot find much on the net. Has anybody on this forum built
> their own, if so, how did they perform?
> Any suggestions or pointers would be appreciated.
> Cheers
> Max
>
I built a J antenna for 2M meters that worked
better than the antenna that was on the radio.
Problem on 2 meters it was kind of clumsy on 70cm maybe it wouldnt be so
bad.
anyway it was a 3/4 wl piece of brazing rod soldered to the centr pin of the
connector and a 1/4wl section soldered to the shield of the connector, rods
were bridged by a couple of small pieces of fiberglass rod I had around.
Before that I had tried the rubber duck antenna , a telescoping antenna, a
telescoping antenna with a tiger tail. Guaging by the number of repeates I
could hit form mty home the j was best but not much better than the
telescoping. Im not sure the tiger tail helped.

2994. Re: Homebrew Handheld Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 04:19:33 UTC
From: "Sal M. Onella" <salmonella@food.poisoning.org>
Message-ID: <snTVi.27408$1_2.4598@newsfe12.phx>
Source record: 34776

<maxpowervk@yahoo.com.au> wrote in message
news:1193799067.228251.69060@q5g2000prf.googlegroups.com...
> I am looking for plans to build some 70cm antennas for my handheld
> radios. Cannot find much on the net. Has anybody on this forum built
> their own, if so, how did they perform?
> Any suggestions or pointers would be appreciated.
> Cheers
> Max
>

General rule: If you are willing to mess with an antenna for long enough to get the VSWR nice and low at some freq, it will probably perform well. http://www.mfjenterprises.com/products.php?prodid=MFJ-842 is a VSWR meter that will help you with that. (http://www.mfjenterprises.com/products.php?prodid=MFJ-864 will do HF, also -- perhaps a better buy than two separate units.) Not everyone likes MFJ.

As to your antenna, what form will it take? How will you use it? Will it mount directly onto the antenna jack on the radio or will it be on the end of a length of coax? Up on a stick? Does it need to be directional, as for service in the far boonies or for a t-hunt?

I have built several 70cm antennas, including two j-poles out of copper pipe. I also built two ground-plane quarter-wave antennas; one was a serious one for hoisting aloft with fishing line. The other one I built directly on/into an old hard-hat as a novelty. I used a BNC panel-mount jack as the basic structure of both of these antennas, with whip and radials sprouting from the jack. I kept messing with the length, angle and shape of the radials until I had a low VSWR. These antennas weren't tested under extreme conditions, but they did a fine job on the local repeaters. (The hard-hat antenna was operated on low power; why risk compounding the existing "drain bamage"?)

If it needs to be super-light for portability, a wire j-pole out of #10 or #12 AWG copper wire would seem workable. Feed it with a short length of coax and you're golden. A j-pole out of TV-twinlead is also a possibility; I've made a few for 2m, encapsulating them in PVC pipe, but never one for 70cm. (I smell a project.) http://cs.yrex.com/ke3fl/prgms/JPOLEFRM.HTM and click j-pole calculations.

Look a some commercial designs and say, "Oh, I can copy that with a stick and some coat hangers." You probably can.

"Sal"

2995. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 04:42:42 UTC
From: Stefan Wolfe <stefan@eml.com>
Message-ID: <472807b9$0$8818$4c368faf@roadrunner.com>
Source record: 34777

"Christopher Cox" <chrisTOPHERcOX@coboxincORORATED.com> wrote in message
news:4727e948$0$32528$4c368faf@roadrunner.com...
> Cecil Moore wrote:
>> Christopher Cox wrote:
>>
>>> Thinking from my "Imagination", it would be cool to find a way to "pump"
>>> the parasitic element to emit a companion photon much like the one
>>> emitted from a atom in a lasing medium.
>>
>>
>> Are there any orbital electron energy step
>> functions that match RF frequencies?
>
> Only ones I know of are in the nanometer range.
>
> Big atom, big orbit!

assume f = 14.1 *10E6/sec

photon energy e=hf=6.63*10E-34 j-sec * 14.1 * 10E6 =98.5 *10E -28J

= photon energy for 14.1 MHz.

Thus, however the quanta are being released, each photon at 14.1 MHz is
being imparted 98.5*10E-28J energy. I see no other means this energy can be
imparted other then via electrons (ON AVERAGE) exchanging orbital states in
the antenna copper (etc.) atoms resulting in a release of this total energy
per photon. How can photons otherwise be manufactured by passing an analog
wavelike-field forcing function through another field?

c=

2996. Re: Homebrew Handheld Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 11:25:24 UTC
From: James Barrett <xucaen@comcast.net>
Message-ID: <5LydnW7It610-LXanZ2dnUVZ_hKdnZ2d@comcast.com>
Source record: 34778

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

maxpowervk@yahoo.com.au wrote:
> I am looking for plans to build some 70cm antennas for my handheld
> radios. Cannot find much on the net. Has anybody on this forum built
> their own, if so, how did they perform?
> Any suggestions or pointers would be appreciated.
> Cheers
> Max
>

I have found tons of information on the web about building antennas.
Here is just a few links. :)

http://www.mattstuff.nq.nu/antennas/quarter-wave.html

http://www.arrl.org/tis/info/antproj.html

http://www.hamuniverse.com/antennas.html

Jim
-----BEGIN PGP SIGNATURE-----
Version: GnuPG v1.4.6 (GNU/Linux)

iD8DBQFHKGYjQuDJiZ/QrH0RAtKbAJ9wVji0xvCAXTQ1L59OjZ3JvNmilACeISXj
oIfgsdos6J7pmEjNuILMh3I=
=qdrf
-----END PGP SIGNATURE-----
```

2997. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 12:00:27 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <u7_Vi.3544$Vx3.282@nlpi069.nbdc.sbc.com>
Source record: 34779

Stefan Wolfe wrote:
> I see no other means this energy can be
> imparted other then via electrons (ON AVERAGE) exchanging orbital states in
> the antenna copper (etc.) atoms resulting in a release of this total energy
> per photon. How can photons otherwise be manufactured by passing an analog
> wavelike-field forcing function through another field?

Above you are referring to tight-binding electrons. But
Our RF antennas make use of *free electrons* which are
thought to exist in the outer orbits of conductors.
Instead of changing orbits within a single atom, these
free electrons jump from atom to atom and from groups
of atoms to other groups of atoms. When a free electron
emits a photon, it is not associated with an orbit
change and so is not quantized to any orbit change. The
photon is instead quantized to the frequency of the
energy source and is therefore coherent with that source
which is our RF transmitters.
--
73, Cecil http://www.w5dxp.com

2998. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 12:03:05 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <X9_Vi.3545$Vx3.3134@nlpi069.nbdc.sbc.com>
Source record: 34780

Jim Kelley wrote:
> I don't think it matters where it is, or how much space is involved. For
> a single source to create an interferernce pattern, there must be a
> reflector somewhere. An antenna tuner for example. Interference is the
> result of the overlap of waves.

Do you consider a dipole in free space to be
a "single source"? There is no reflector yet
there is plenty of interference.
--
73, Cecil http://www.w5dxp.com

2999. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 13:17:05 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fg9v8h$2kt$1@news.albasani.net>
Source record: 34781

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

http://www.builderau.com.au/news/soa/Aussie-telcos-looking-into-powerline-broadband-/0,339028227,339283381,00.htm

JS

3000. Re: BPL draws more media attention ...

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 13:20:38 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fg9vf6$2kt$2@news.albasani.net>
Source record: 34782

John Smith I wrote:
> http://www.itbusinessedge.com/blogs/cip/?p=170
>
> Regards,
> JS

http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20071030006273&newsLang=en

JS

3001. WARNING: Off Topic Post!

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 13:35:34 UTC
From: John Smith <assemblywizard@gmail.com>
Message-ID: <fga0b7$5pi$2@news.albasani.net>
Source record: 34783

The Top Ten Reasons Men Prefer Guns Over Women

#10. You can trade an old 44 for a new 22.

#9. You can keep one gun at home and have another for when you're on the road.

#8. If you admire a friend's gun and tell him so, he will probably let you try it out a few times.

#7. Your primary gun doesn't mind if you keep another gun for a backup.

#6. Your gun will stay with you even if you run out of ammo.

#5. A gun doesn't take up a lot of closet space.

#4. Guns function normally every day of the month.

#3. A gun doesn't ask , "Do these new grips make me look fat?"

#2. A gun doesn't mind if you go to sleep after you use it.

And the #1 reason...

YOU CAN BUY A SILENCER FOR A GUN

[above "stolen" from another NG]

JS

3002. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 14:15:13 UTC
From: "H. Adam Stevens" <hstevens@totalaccess.net>
Message-ID: <13ih3flm2val0f0@corp.supernews.com>
Source record: 34784

"Cecil Moore" <nospam@w5dxp.com> wrote in message
news:nVLVi.15921$lD6.13348@newssvr27.news.prodigy.net...
> H. Adam Stevens wrote:
>> "coherent photons" It's a laser? Cool.
>
> Surprise! Our $100 RF transmitters emit coherent photons just
> like a $100,000 laser. Maybe we should call them RASERs. :-)
> Do you remember MASERs?
> --
> 73, Cecil http://www.w5dxp.com

"transmitters emit coherent photons "

Sure Cecil.

And the laser pointer I use was a bit less expensive.

MASER: Microwave Amplification by Stimulated Emission of Radiation

"The fundamental physical principle motivating the MASER is the concept of
stimulated emission, first introduced by Einstein in 1917. Before defining
it we look at two related but more familiar phenomena involving the
interplay between matter and radiation, absorption and spontaneous
emission."
http://einstein.stanford.edu/content/faqs/maser.html

"MASER. In each frame, a molecule in the upper level of the MASER transition
(that is, in the high energy, excited state) is indicated by a large red
circle, while one in the lower level (low energy state) is indicated by a
small blue circle. (a) All of the molecules are in the upper state and a
photon of wavelength l (shown in green) is incident from the left. (b) The
photon l stimulates emission from the first molecule, so there are now two
photons of wavelength l, in phase. (c) These photons stimulate emission from
the next two molecules, resulting in four photons of wavelength l. (d) The
process continues with another doubling of the number of photons."

Stimulated Emission of Radiation is a quantum mechanical effect that has
exactly zero to do with HF radio.
For microwaves we use molecules, for light we use atoms.

73
H.
NQ5H

"Waves of average nausea" is more like it.

3003. Re: Homebrew Handheld Antennas

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 15:19:23 UTC
From: Wayne <mygarbagecan@verizon.net>
Message-ID: <%11Wi.7061$Q%3.4538@trnddc04>
Source record: 34785

<maxpowervk@yahoo.com.au> wrote in message
news:1193799067.228251.69060@q5g2000prf.googlegroups.com...
>I am looking for plans to build some 70cm antennas for my handheld
> radios. Cannot find much on the net. Has anybody on this forum built
> their own, if so, how did they perform?
> Any suggestions or pointers would be appreciated.
> Cheers
> Max
>

I made a helical talkie antenna once from a piece of rubber rod, some wire, shrink sleeving and a connector. I don't have any detailed constuction dimensions. But the tuning involved pulling the end of the wire from the shrink sleeving, and snipping off small sections of the wire while measuring field strength. Several iterations were required, but it worked.

3004. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 16:20:05 UTC
From: kb9rqz@hotmail.com
Message-ID: <qgahi3530ubm16bf7gepj0oh6udb6dafnc@4ax.com>
Source record: 34786
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
>>
>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS
bearign repeating

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
nor is Konstans@hotmail.com ever udsed on the usenet from anywhere but google

posts from these sorucees are fakes
but till at least terranews is back running well I might use anyserver that comes to hand

and get ou the newly recovered KB9RQZ.blogspot.com as well

G

--
Posted via a free Usenet account from http://www.teranews.com

3005. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 16:53:19 UTC
From: John Doe <hgorden@adelphia.net>
Message-ID: <T8KdnXYJvJDKLLXanZ2dnUVZ_uCinZ2d@adelphia.com>
Source record: 34787
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

This post is not OT on code!!!!

<kb9rqz@hotmail.com> wrote in message
news:qgahi3530ubm16bf7gepj0oh6udb6dafnc@4ax.com...
> On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
> <assemblywizard@gmail.com> wrote:
>
>>K4YZ wrote:
>>> Nope.
>>>
>>> The IP Address and servers are complete proof that I do NOT share
>>> any annonymous character's "address".
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>
> G
>
> --
> Posted via a free Usenet account from http://www.teranews.com
>

3006. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 17:25:53 UTC
From: kb9rqz@hotmail.com
Message-ID: <ekehi35dl87k0kagad00sa64tne73dfgkp@4ax.com>
Source record: 34788
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Wed, 31 Oct 2007 12:53:19 -0400, "John Doe" <hgorden@adelphia.net>
wrote:

>This post is not OT on code!!!!
>

it is entirely on topic as it is a about control

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
adams

woger you are a Congress all in your own head

http://kb9rqz.bravejournal.com/
altopia is never used by KB9RQZ
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G

--
Posted via a free Usenet account from http://www.teranews.com

3007. Re: an ontopic post about code

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 17:26:00 UTC
From: kb9rqz@hotmail.com
Message-ID: <7lehi3t8uk64c3n8mpu7sookpfglf1ltaq@4ax.com>
Source record: 34789
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.policy,rec.radio.amateur.antenna

On Fri, 01 Dec 2006 09:36:47 -0800, John Smith
<assemblywizard@gmail.com> wrote:

>K4YZ wrote:
>> Nope.
>>
>> The IP Address and servers are complete proof that I do NOT share
>> any annonymous character's "address".
>>
>> Sounds like Lennie, to me....
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>> Steve, K4YZ
>>
>
>To anyone with even an elementary understanding of anonymous proxies,
>anonymous remailers, zombie backdoors, etc., the ability to change ones
>IP address and header details is simplistic, indeed, with little time
>spent anyone can appear to be "coming" from anywhere in the world.
>
>You waste my time. Worse, you think us all idiots here. You remind me
>of the "street smart" prosecutors and defense attorneys who stack jurys
>with members of little or no technical knowledge and then call in
>"expert witnesses" and propose arguments of technical details to boggle
>their minds.
>
>You have only proven that you, yourself are either ignorant to such
>technical details, or else you are indeed street smart, I favor the
>latter in this case (however, if you in the dark about such things, 15
>minutes on google will enlighten you.)
>
>JS

"one useless man is disgrace 2 become a law firm 3 or more become a congress"
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altopia is never used by KB9RQZ
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but till at least terranews is back running well I might use anyserver that comes to hand

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G

--
Posted via a free Usenet account from http://www.teranews.com

3008. question about Yaesu FT-857D

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 17:30:01 UTC
From: Steve <sdaniel13@speakeasy.net>
Message-ID: <1193851801.554148.111740@19g2000hsx.googlegroups.com>
Source record: 34790

I'm a new ham, looking to buy a transceiver that I'll use as a base station. I want something that won't break the bank, but that will give me room in which to "grow" as I upgrade my license. I have my eye on the Yaesu FT-857D right now and it's gotten some good reviews on the web.

I notice that the FT-857D's current consumption is a maximum of 22 amps, but I'm guessing that this is when transmitting with maximum power on HF, correct? For operating on VHF and UHF, would my Astron 20 amp power supply suffice? I can always upgrade power supplies later, if necessary, when I upgrade my license, but I'd like to think that, if I buy the FT-857D now, I won't also have to buy another power supply right away.

Thanks,

Steve

3009. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 19:08:22 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fgak4h$2vo$1@news.service.uci.edu>
Source record: 34791

Owen Duffy wrote:
> Jim Kelley <jwkelley@uci.edu> wrote in
> news:fg8ds5$m4s$1@news.service.uci.edu:
>
>
>>
>>Owen Duffy wrote:
>>
>>>Jim Kelley <jwkelley@uci.edu> wrote in news:fg8c3ekbc1
>>>@news.service.uci.edu:
>>>
>>>
>>>
>>>>I don't think it matters where it is, or how much space is involved.
>>>>For a single source to create an interferernce pattern, there must be
>>>>a reflector somewhere. An antenna tuner for example. Interference
>>>>is the result of the overlap of waves.
>>>
>>>
>>>Jim, could a diffractor or refractor provide the physical device that
>>>might lead to interference?
>>>
>>>Owen
>>
>>I am almost certain that you already know the answer to that
>>question, so I'm left to wonder why you are asking it.
>
>
> No, I am not certain, and in the interest of learning from you I am
> questioning the generality of whether a reflector is the only means of
> creating interference from a single source.
>
> Owen

Fair enough, Owen. The easiest way I can think of to demonstate interference of light is with a laser and a pair of narrow, closely spaced slits. A diffration grating is essentially an array of slit-like reflectors that generates a more complex type of interference pattern. You could use one of the internal surfaces of a prism (refractor) as a reflector. Partially reflective beam splitters or mirrors are often used in interfereometers. And there are of course methods by which to create sonic interference. The simplest way is to wire a pair of stereo speakers out of phase and observe the frequency dependent phase cancellation effect by listening to music at

different positions and speaker separations.

There are any number of possible ways to generate interference phenomena, all of which utilize real physical objects to redirect radiation. It is the real physical objects used to create the interference pattern that redirect energy.

73, ac6xg

3010. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 19:25:47 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fgal5b$461$1@news.service.uci.edu>
Source record: 34793

Cecil Moore wrote:

> Jim Kelley wrote:
>
>> I don't think it matters where it is, or how much space is involved.
>> For a single source to create an interferernce pattern, there must be
>> a reflector somewhere. An antenna tuner for example. Interference is
>> the result of the overlap of waves.
>
>
> Do you consider a dipole in free space to be
> a "single source"? There is no reflector yet
> there is plenty of interference.

If there is no reflector and no splitter to redirect a portion of the ratiated energy, but an interference pattern still results, then there must be more than a single source. It should be fairly obvious that both parts of the antenna must be present in order to generate the dipole-type interference pattern.

73, ac6xg

3011. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 19:34:53 UTC
From: K7ITM <k7itm@msn.com>
Message-ID: <1193859293.400783.36390@q5g2000prf.googlegroups.com>
Source record: 34792

On Oct 31, 12:08 pm, Jim Kelley <jwkel...@uci.edu> wrote:
> Owen Duffy wrote:
> > Jim Kelley <jwkel...@uci.edu> wrote in
> >news:fg8ds5$m4s$1@news.service.uci.edu:
>
> >>Owen Duffy wrote:
>
> >>>Jim Kelley <jwkel...@uci.edu> wrote in news:fg8c3ekbc1
> >>>@news.service.uci.edu:
>
> >>>>I don't think it matters where it is, or how much space is involved.
> >>>>For a single source to create an interferernce pattern, there must be
> >>>>a reflector somewhere. An antenna tuner for example. Interference
> >>>>is the result of the overlap of waves.
>
> >>>Jim, could a diffractor or refractor provide the physical device that
> >>>might lead to interference?
>
> >>>Owen
>
> >>I am almost certain that you already know the answer to that
> >>question, so I'm left to wonder why you are asking it.
>
> > No, I am not certain, and in the interest of learning from you I am
> > questioning the generality of whether a reflector is the only means of
> > creating interference from a single source.
>
> > Owen
>
> Fair enough, Owen. The easiest way I can think of to demonstate
> interference of light is with a laser and a pair of narrow, closely
> spaced slits. A diffration grating is essentially an array of
> slit-like reflectors that generates a more complex type of
> interference pattern. You could use one of the internal surfaces of a
> prism (refractor) as a reflector. Partially reflective beam splitters
> or mirrors are often used in interfereometers. And there are of
> course methods by which to create sonic interference. The simplest
> way is to wire a pair of stereo speakers out of phase and observe the
> frequency dependent phase cancellation effect by listening to music at
> different positions and speaker separations.
>
> There are any number of possible ways to generate interference
> phenomena, all of which utilize real physical objects to redirect
> radiation. It is the real physical objects used to create the

> interference pattern that redirect energy.
>
> 73, ac6xg

You can also use pure refraction--for example through multiple prisms whose output face is not parallel with the input face, to bend the light around as many total degrees as you wish (barring attenuation in the prism). You can also bend the light away, and then back, to get a displacement. But I suppose in all these, the effect depends on waves coming from what appear to be different points in space.

Of course, it does not require coherent sources to see the effects of interference. Interference is an instantaneous effect, and you can take the average over a single cycle to see the power. So even with sources on slightly different frequencies, it's easy to see the pattern. However, with different frequencies, the pattern is ever-changing, repeating when the sources are all back to the starting phase.

As H.A.S. says, "waves of average nausea" or maybe it's becoming intense nausea. Are we sea-sick yet? Or just sick and tired of it.

Cheers,
Tom

3012. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 19:57:32 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <M65Wi.17824$JD.17406@newssvr21.news.prodigy.net>
Source record: 34794

Jim Kelley wrote:
>> Do you consider a dipole in free space to be
>> a "single source"? There is no reflector yet
>> there is plenty of interference.
>
> If there is no reflector and no splitter to redirect a portion of the
> ratiated energy, but an interference pattern still results, then there
> must be more than a single source. It should be fairly obvious that
> both parts of the antenna must be present in order to generate the
> dipole-type interference pattern.

Just trying to understand - are you considering the two
sections of dipole to be two separate sources?
--
73, Cecil http://www.w5dxp.com

3013. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 20:09:00 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <wh5Wi.65704$YL5.14723@newssvr29.news.prodigy.net>
Source record: 34795

K7ITM wrote:
> Of course, it does not require coherent sources to see the effects of
> interference.

True, but it does require coherent waves to accomplish
the permanent wave cancellation described at:

micro.magnet.fsu.edu/primer/java/scienceopticsu/interference/waveinteractions/index.html

"... when two waves of equal amplitude and wavelength that are
180-degrees ... out of phase with each other meet, they are not actually
annihilated, ... All of the photon energy present in these waves must
somehow be recovered or redistributed in a new direction, according to
the law of energy conservation ... Instead, upon meeting, the photons
are redistributed to regions that permit constructive interference, so
the effect should be considered as a redistribution of light waves and
photon energy rather than the spontaneous construction or destruction of
light."

This is what happens to the reflected waves at a Z0-match
in a transmission line.
--
73, Cecil http://www.w5dxp.com

3014. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 20:25:28 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fgaom3$7qf$1@news.service.uci.edu>
Source record: 34797

K7ITM wrote:

> On Oct 31, 12:08 pm, Jim Kelley <jwkel...@uci.edu> wrote:
>
>>Owen Duffy wrote:
>>
>>>Jim Kelley <jwkel...@uci.edu> wrote in
>>>news:fg8ds5$m4s$1@news.service.uci.edu:
>>
>>>>Owen Duffy wrote:
>>
>>>>>Jim Kelley <jwkel...@uci.edu> wrote in news:fg8c3ekbc1
>>>>>@news.service.uci.edu:
>>
>>>>>>I don't think it matters where it is, or how much space is involved.
>>>>>>For a single source to create an interferernce pattern, there must be
>>>>>>a reflector somewhere. An antenna tuner for example. Interference
>>>>>>is the result of the overlap of waves.
>>
>>>>>Jim, could a diffractor or refractor provide the physical device that
>>>>>might lead to interference?
>>
>>>>>Owen
>>
>>>>I am almost certain that you already know the answer to that
>>>>question, so I'm left to wonder why you are asking it.
>>
>>>No, I am not certain, and in the interest of learning from you I am
>>>questioning the generality of whether a reflector is the only means of
>>>creating interference from a single source.
>>
>>>Owen
>>
>>Fair enough, Owen. The easiest way I can think of to demonstate
>>interference of light is with a laser and a pair of narrow, closely
>>spaced slits. A diffration grating is essentially an array of
>>slit-like reflectors that generates a more complex type of
>>interference pattern. You could use one of the internal surfaces of a
>>prism (refractor) as a reflector. Partially reflective beam splitters
>>or mirrors are often used in interfereometers. And there are of
>>course methods by which to create sonic interference. The simplest
>>way is to wire a pair of stereo speakers out of phase and observe the
>>frequency dependent phase cancellation effect by listening to music at
>>different positions and speaker separations.

>>
>>There are any number of possible ways to generate interference
>>phenomena, all of which utilize real physical objects to redirect
>>radiation. It is the real physical objects used to create the
>>interference pattern that redirect energy.
>>
>>73, ac6xg
>
>
> You can also use pure refraction--for example through multiple prisms
> whose output face is not parallel with the input face, to bend the
> light around as many total degrees as you wish (barring attenuation in
> the prism). You can also bend the light away, and then back, to get a
> displacement. But I suppose in all these, the effect depends on waves
> coming from what appear to be different points in space.
>
> Of course, it does not require coherent sources to see the effects of
> interference. Interference is an instantaneous effect, and you can
> take the average over a single cycle to see the power. So even with
> sources on slightly different frequencies, it's easy to see the
> pattern. However, with different frequencies, the pattern is ever-
> changing, repeating when the sources are all back to the starting
> phase.
>
> As H.A.S. says, "waves of average nausea" or maybe it's becoming
> intense nausea. Are we sea-sick yet? Or just sick and tired of it.

Yes, in the future we should try to better refinine our
generalizations to include any means which can be used to redirect one
or more paths of radiated energy (not including particles with rest
mass greater than zero) in such a way as to be coincident at some
point in space. Lest we allow ourselves to stray too far from it, the
only point attempting to be noticed here is that all such means must
be physical objects and not photons, waves, or interference patterns
created by any or all the above. Disclaimer: This is neither a new
nor a unique concept.

73, ac6xg

3015. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 20:31:23 UTC
From: Roy Lewallen <w7el@eznec.com>
Message-ID: <13ihph0nt8puo69@corp.supernews.com>
Source record: 34796

Jim Kelley wrote:
>
>
> Cecil Moore wrote:
>
>> Jim Kelley wrote:
>>
>>> I don't think it matters where it is, or how much space is involved.
>>> For a single source to create an interferernce pattern, there must be
>>> a reflector somewhere. An antenna tuner for example. Interference
>>> is the result of the overlap of waves.
>>
>>
>> Do you consider a dipole in free space to be
>> a "single source"? There is no reflector yet
>> there is plenty of interference.
>
> If there is no reflector and no splitter to redirect a portion of the
> ratiated energy, but an interference pattern still results, then there
> must be more than a single source. It should be fairly obvious that
> both parts of the antenna must be present in order to generate the
> dipole-type interference pattern.
>
> 73, ac6xg

A dipole is by no means a single (point) source. Each tiny part of the dipole creates a field proportional to the current at that tiny part, so in effect it behaves like an infinite number of sources which are spread out in space along the dipole conductors. Interference of all those various fields is what creates the familiar dipole radiation pattern. In fact, moment method antenna analysis programs such as NEC and EZNEC break the antenna into a finite number of segments and calculate the current (magnitude and phase) on each segment. It then calculates the field produced by each segment according to its length, orientation, and current. The sum of the fields is shown as the radiation pattern. This process can be done manually as well.

The hypothetical isotropic radiator is a point source. It has a perfectly spherical pattern because there's no interference.

Roy Lewallen, W7EL

3016. danm pipes frose agian last nite winter is back

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 20:56:42 UTC
From: kb9rqz <kornstains@homail.com>
Message-ID: <4728e034$0$26479$88260bb3@free.teranews.com>
Source record: 34798
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.antenna,rec.radio.scanner

tis time the tiolet blow up real bad so anoter day of shitting in back yard behind teh trash piles I dont have a camra so i draw pic of it see four you http://www.angelfire.com/sc3/swinston/images/Mar11ToiletExplode.bmp

--
Posted via a free Usenet account from http://www.teranews.com

3017. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 21:24:47 UTC
From: Jim Kelley <jwkelley@uci.edu>
Message-ID: <fgas6qbdg1@news.service.uci.edu>
Source record: 34800

Cecil Moore wrote:

> Jim Kelley wrote:
>
>>> Do you consider a dipole in free space to be
>>> a "single source"? There is no reflector yet
>>> there is plenty of interference.
>>
>>
>> If there is no reflector and no splitter to redirect a portion of the
>> ratiated energy, but an interference pattern still results, then there
>> must be more than a single source. It should be fairly obvious that
>> both parts of the antenna must be present in order to generate the
>> dipole-type interference pattern.
>
>
> Just trying to understand - are you considering the two
> sections of dipole to be two separate sources?

I think I know what you want me to say, but I need you to go first.
How many sources is a monopole? :-)

jk

3018. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 21:36:01 UTC
From: Gene Fuller <W4SZzzzzzz@att.net>
Message-ID: <5z6Wi.308788$ax1.69693@bgtnsc05-news.ops.worldnet.att.net>
Source record: 34799

Cecil Moore wrote:
> K7ITM wrote:
>> Of course, it does not require coherent sources to see the effects of
>> interference.
>
> True, but it does require coherent waves to accomplish
> the permanent wave cancellation described at:
>
> micro.magnet.fsu.edu/primer/java/scienceopticsu/interference/waveinteractions/index.html
>
>
> "... when two waves of equal amplitude and wavelength that are
> 180-degrees ... out of phase with each other meet, they are not actually
> annihilated, ... All of the photon energy present in these waves must
> somehow be recovered or redistributed in a new direction, according to
> the law of energy conservation ... Instead, upon meeting, the photons
> are redistributed to regions that permit constructive interference, so
> the effect should be considered as a redistribution of light waves and
> photon energy rather than the spontaneous construction or destruction of
> light."
>
> This is what happens to the reflected waves at a Z0-match
> in a transmission line.

Cecil,

The FSU website you like to reference is a perfect example of the
problem Jim is describing.

As shown, the FSU demonstration is physically impossible. There is no
way for two plane waves to be trucking along independently and then
suddenly decide to interfere.

There is basically nothing wrong with the demo as far as it goes; it
nicely shows the effects of combined phase and amplitude on the
resulting wave. However, the demo is not rigorous science or
mathematics. It is not suitable as an authoritative reference.

73,
Gene
W4SZ

3019. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 22:28:26 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <ck7Wi.3302$nN3.2613@newssvr17.news.prodigy.net>
Source record: 34801

Jim Kelley wrote:
> I think I know what you want me to say, but I need you to go first. How
> many sources is a monopole? :-)

As many segments as are specified using EZNEC.
Does that help?
--
73, Cecil http://www.w5dxp.com

3020. Re: "Waves of Average Power"

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 22:45:42 UTC
From: Cecil Moore <nospam@w5dxp.com>
Message-ID: <qA7Wi.38292$eY.31784@newssvr13.news.prodigy.net>
Source record: 34802

Gene Fuller wrote:
> As shown, the FSU demonstration is physically impossible. There is no
> way for two plane waves to be trucking along independently and then
> suddenly decide to interfere.

They do NOT "truck along and then suddenly decide to interfere". Such nonsense is just a strawman presented for the purpose of obfuscating the technical facts.

The two independent waves are generated at a physical impedance discontinuity, the Z0-match point, and are immediately canceled at that point. The energy in the canceled waves is redistributed in the only other direction possible in a one-dimensional transmission line.

Exactly the same thing happens when the external reflection is canceled by the internal reflection at a non-reflective 1/4WL thin-film coating on glass. Quoting the Melles Groit web page:

"In the absence of absorption or scatter, the principle of conservation of energy indicates all 'lost' reflected intensity will appear as enhanced intensity in the transmitted beam."

i.e. the energy re-reflected at the Z0-match joins the forward wave toward the load. The conservation of energy principle will not allow any other result. Dr. Best's phantom waves continuing to flow toward the source with zero energy is just a wet dream.
--
73, Cecil http://www.w5dxp.com

3021. Re: question about Yaesu FT-857D

Newsgroup: rec.radio.amateur.antenna
Date: 2007-10-31 23:55:56 UTC
From: Highland Ham <abcgm0csz.kn6whxyz@dsl.pipex.com>
Message-ID: <mPWdnW05fJWGi7TanZ2dnUVZ8sOonZ2d@pipex.net>
Source record: 34803

> I notice that the FT-857D's current consumption is a maximum of 22
> amps, but I'm guessing that this is when transmitting with maximum
> power on HF, correct? For operating on VHF and UHF, would my Astron 20
> amp power supply suffice? I can always upgrade power supplies later,
> if necessary, when I upgrade my license, but I'd like to think that,
> if I buy the FT-857D now, I won't also have to buy another power
> supply right away.
==========
That 22 Amperes max is highly likely for more than 100 Watts RF PEP
(Peak Envelope Power) You rarely need that peak current ; the average
current being approx 8 Amperes on transmit (even with audio compression)
If you are worried that your PSU can't handle brief excursions above 20
Amperes , causing your PSU (perhaps) to shut down or the supply voltage
to drop (when your unit has a voltage fold back facility) ,you can
simply put a (sealed)12 v lead acid battery with a capacity of say 10
Amperes*Hours (AH) parallel to the PSU. The battery will then take care
of the peak current.
With a battery of say 18AH (golf trolley variety) your power supply
unit (PSU) won't need a capacity higher than 8-10 Amperes since the
battery will supply the higher current.
On receive the current will be approx 2 Amperes ,with the PSU having
sufficient excess capacity to charge the battery .

Frank GM0CSZ / KN6WH